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PATTERNS OF MASTERY AND CONFLICT RESOLUTION AT THE ELEMENTARY SCHOOL LEVEL.

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EFFORTS WERE DIRECTED TOWARD THE EXPLORATION OF CONNECTIONS BETWEEN THE HOME AND SCHOOL BACKGROUND INFLUENCES OF FOURTH-GRADE CHILDREN, AND THE PATTERNS OF RESPONSE THROUGH WHICH CHILDREN MASTER CHALLENGE, REACT TO OPPORTUNITY, AND EXPRESS AND HANDLE CONFLICT. THIS CURRENT RESEARCH WAS BUILT UPON AN EARLIER STUDY WHICH ASSESSED THE EFFECTS OF MODERN AND TRADITIONAL SCHOOLING ON THE PSYCHOLOGICAL FUNCTIONING OF CHILDREN. IN THE STUDY REPORTED HERE, THE SAME DATA HAVE BEEN USED, BUT THE ANALYSES HAVE BEEN EXPANDED, THE MATERIAL REORGANIZED, AND DIFFERENT ASPECTS HAVE BEEN BROUGHT INTO FOCUS. PROCEDURES, RESULTS, AND CONCLUSIONS DEAL WITH--(1) THE ANTECEDENTS OF CHILDREN'S MASTERY PATTERNS EXAMINING THE CHARACTERISTICS OF MODERN AND TRADITIONAL FAMILIES, AND (2) CHILDREN'S MASTERY PATTERNS, WITH THE HOME AND SCHOOL AS INFLUENTIAL FACTORS. PART TWO IS CONCERNED WITH CHILDREN'S INVOLVEMENT IN FAMILY LIFE. PART THREE FOCUSES ON ACHIEVEMENTS IN SCHOOL. (JC)

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PATTERNS OF MASTERY AND CONFLICT RESOLUTION AT THE ELEMENTARY SCHOOL LEVEL

Cooperative Research Project No. 1401

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PATTERNS OF MASTERY AND CONFLICT RESOLUTION AT THE ELEMENTARY SCHOOL LEVEL

INTRODUCTION

The project to be reported represents a specialized extension of a previous study. The previous study was designed to evaluate the impact of contrasting school experiences on the psychological functioning of children, and focussed on group comparisons of nine year old children from different kinds of schools. In the project reported here, the same basic data have been used, but the analyses have been expanded in particular directions, the material has been organized along different lines, and different aspects have been brought into focus.

The current project takes as its central focus the investigation of the nature and antecedents of the children's coping patterns -- those patterns of reaction through which they master challenge, react to opportunity, express and handle conflict. In this project we have, first of all, concentrated on exploring the connections between the important background influences in the child's life -- both home and school -- and the child's patterns of response and mastery. In order to do this, we have developed the analysis and description of the children's family backgrounds much further than previously, so that the influential effects of the school and those of the home might be considered in conjunction with each other. Second, we have selected certain dimensions of child functioning which are deemed to be especially important at the developmental stage studied, and focussed on them for particular and detailed analysis.

Since the current project has drawn its basic material from the previous large scale study, and since this report will attempt, at many points, to integrate procedures, analyses and findings from the previous work into its content, it seems imperative to describe the previous study briefly as general background for the reader.

The original study was entitled "The Psychological Impact of School Experience: a Comparative Study of Children in the Middle Years."[1] It arose out of a series of developments in psychology and education, whereby considerable advance in our psychological understanding of *child development*, personality formation and the nature of motivation and learning had led some educators to redefine the scope of the school's task and to formulate profoundly new philosophies and techniques of education. The research study was conceived of at a point when this modern movement in education had been evolving over a period of several decades. The study was an attempt to assess empirically the effects of this different kind of education on children, using as its basic approach a comparison of the functioning of children who attended schools which differed along a "modern-traditional" continuum in terms of values, goals and methods.

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[1] This study was supported by the National Institute of Mental Health, U.S. Public Health Service, grant ~~M-1075.~~

For fuller descriptions of the project and reports of its findings, see Bibliography II.

Four schools were selected for the project. They were all urban schools serving middle class populations. They were considered good schools, benign in their attitudes and dedicated within their own framework to effective education, but they differed in the extent to which contemporary thinking about child development and learning had been integrated into their educational philosophies. They differed, that is, in their positions on such defining factors of the modern-traditional continuum as the tendency to experiment with teaching methods and curriculum and the effort to root curriculum in content meaningful to children; in the terms by which they defined mastery, achievement and progress; in the extent to which they valued intellectual exploration and child initiative; in the extent to which they adapted learning experiences and standards to individual needs and growth patterns; in their attitudes toward and use of the peer group; in their concepts of the teacher's role and the teacher-child relationship. In general, it was the more modern schools that tended to explore new methods, to base their teaching on their understanding of growth patterns, to foster individual development and peer group activity, and to highlight the teacher's relationship to children and her rational exercise of authority as pivotal factors in children's learning and growth.

The four schools -- one private, three public -- can briefly be described as follows:

"Conrad" School -- a small independent school which has for many years exemplified modern educational values, though, by definition, it is unique in its particular atmosphere and practices.

"Dickens" School -- a public school outstanding for its activity in adapting new trends to the practical requirements of a large school, part of a larger hierarchy and responsible to the community as a whole.

"Adams" School -- a public school in which elements of the modern approach appear to be grafted onto a substantial body of more traditional concepts and practices.

"Browning" School -- a public school relatively unaffected by modern trends, tending to value and sustain more traditional methods.

Conrad and Dickens are considered essentially modern, with Conrad the most modern of the group, and Adams and Browning are considered essentially traditional.

In these schools, research centered on 105 fourth grade children -- 57 boys and 48 girls -- nine to ten years old, from upper middle class, well educated families.

Data were collected in each of the schools by four independent research teams. Over a two year period, one team collected data on the schools as social institutions, another observed in the classrooms of the study children, focussing both on classroom life and on particular study children, a third interviewed and gave questionnaires to the mothers of the study subjects, and a fourth interviewed and tested the 105 study children in a series of six individual sessions. The last two areas of data are of special relevance for the current project. The Interview and Questionnaire techniques used with the mothers, and the measures derived from them, will be described in some detail in the body of the report. The techniques and measures used with the children will also be described as they become relevant. It might be noted in general, however, that the range and scope of the techniques used with the children was broad, including interviews, intelligence and achievement testing, projective techniques, play sessions, problem solving situations,[1] and a variety of other miscellaneous techniques developed for the purposes of the study and adapted to the age level of the study subjects.

Analysis of the data in this original study was directed toward comparison of children from the modern and traditional schools, toward normative findings related to the age level, and toward the clarification of sex differences in response patterns.

In the original statement of the purposes of the current study, two broad objectives were noted -- to ascertain and describe patterns of mastery in a group of nine year old children, and to explore the relations between the children's functioning and the nature of their home and school environments, with particular attention to the "modern" or "traditional" quality of those backgrounds and to the congruence or dissonance between home and school.

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[1] Problem solving techniques were administered only to the children seen during the second year of the research.

The material to be reported here has been analyzed in keeping with these objectives, and the findings are presented in three relatively independent sections, as described below.

In Part I, the primary stress is on exploration of the connection between antecedent conditions in the child's life and the nature of the child's patterns of functioning. For the child in the middle years, home and school together are the important antecedent conditions; they are the predominant factors in his personal world and daily experience and they are obviously influential in the formation of his response patterns. As has been noted, it was part of the purpose of this project to assess the impact of these two forces on the child, evaluating their independent and interacting effects to the extent possible. In order to do this, we needed a clear description and understanding of the school and home backgrounds.

The school environments of the children involved in this research had already been thoroughly studied and described in the previous work. In this project, however, the study of the families has been brought to a new stage. A sample of families has been selected which represent clear and contrasting orientations toward child rearing along the same dimension as the one which distinguishes the schools — the modern-traditional continuum. The first half of Part I describes the selection of the families and presents the results of comparisons between clear modern and traditional families on a series of dimensions relevant to child rearing attitudes, the mother-child relationship and other aspects of home background.

The second half of Part I reports a series of findings concerning the functioning of the children from these selected homes. A wide range of psychological functioning is considered, including aspects of the children's attitudes toward family and adults, their self concepts and feelings, and their cognitive performance and attitudes toward learning. Since it was our objective to explore the connection between child functioning and both home and school backgrounds, however, the findings from the previous study of school effects are also reviewed in this section, and an attempt is made to estimate the relative and interacting contributions of home and school influence. It has not been possible to consider the effects of dissonant home and school backgrounds on a systematic basis because the number of children from clearly dissonant homes and schools, in this sample, has proved to be small. We have been able to consider children from different kinds of congruent home and school backgrounds, however, and in this section, findings based on the comparison of children from congruent traditional and congruent modern home-school backgrounds are presented.

In Parts II and III of the report, the primary stress is on exploring patterns of coping and mastery in two particular areas of functioning -- the child's involvement in family life and his achievement in school. For the child of nine or ten, the school age child, the challenge and opportunity to move beyond the family unit into a broader world, and the opportunity and demand to expand knowledge, perform well, become "industrious," as Ericson formulates it, are two of the salient challenges of his developmental stage. They present him both with conflicts to resolve and opportunities for growth and mastery. These areas have therefore been selected for special and detailed analysis.

Part II considers the pattern and implications of the children's relative involvement in family life. All the children of the study sample were rated in terms of the primacy of family in their internal life space. Part II reports on the derivation of this rating from the study material, considers the extent to which family life is generally central to children of this age and the extent to which this centrality varies among children of this sample, and presents the findings concerning the relationship between greater or lesser involvement in family life concerns and other aspects of child functioning and family background.

Part III considers the pattern and implications of achievement in school. A sample of relatively high and low achievers was selected from the three public schools of our sample, using the judgment and evaluation of a child's own school as the criterion of his status. Part III explores the pattern of their performance in different kinds of cognitive situations, the constellation of their attitudes concerning achievement and school, their status with their classroom peers and the nature of their family backgrounds. High and low achieving children are compared on these dimensions and the results of these comparisons are presented and discussed.

It will be noted, at various points in this report, that data limitations sometimes affect the scope of exploration or reduce the extent to which conclusions can be definitive. This would seem an inevitable problem, when data are explored in many different ways and when, as has happened in this study, the analysis of the material has indicated the crucial role of certain variables, such as the sex of the child, and the consequent necessity of subdividing the sample to an extent not anticipated. Despite points of methodological limitation, however, the richness of the data in this study have prompted its through exploration, and the yield both of clear findings and of important indications for further investigation would seem certainly to have justified this approach.

PART I

A. ANTECEDENTS OF CHILDREN'S MASTERY PATTERNS:

CHARACTERISTICS OF CLEAR MODERN AND TRADITIONAL FAMILIES

ANTECEDENTS OF CHILDREN'S MASTERY PATTERNS:

CHARACTERISTICS OF CLEAR MODERN AND TRADITIONAL FAMILIES

Virginia Stern and Edna Shapiro

Introduction

In their approach to the description and understanding of child development and behavior, psychologists and educators have long been interested in the family unit and in parent-child interaction. A considerable body of theory has developed concerning the connections between factors and forces in the family and the nature of child development, and an increasing groundswell of research continues to explore the specifics of these connections. The material to be presented in this section of the report is a part of that body of research and theory.

The families to be described were originally studied as part of the more extensive project described in the introduction to this report -- a project focused on the differential effects of modern and traditional schooling on nine year old children -- and this fact affected both the collection and analysis of the parent data. First, there were inevitable limitations on the scope of the data, since much of the original research effort had to be directed along other lines. It should be noted, however, that the questionnaire and interview material concerning families is comparable to the data of many studies which focus on parent attitudes as major variables. Second, the major themes of the larger research study shaped the analysis of the parent material. Thus, the focus of the larger study on the modern-traditional dimension was carried through in the analysis of the parent data, allowing home and school data to be compared and evaluated in relation to their influence on child functioning. The use of the modern-traditional framework in analysis of the parent data was dictated not only by its expediency, in terms of providing data comparable to that available on the schools, but by its value as an organizing concept for certain aspects of parental attitudes and behavior. In addition, dimensions of analysis not considered germane to the modern-traditional continuum but crucial in terms of the mother-child relationship have also been included.

Although the bulk of this report will highlight the differences between mothers who hold clearly modern or traditional viewpoints in child rearing, it should be noted that in some respects the sample of mothers included in this study is a homogeneous one. Not only are they generally comparable in socioeconomic level and educational background, but for all these mothers, family life in general and their children in particular, play a central role in their lives. Whether they are housewives or working mothers, whether they are emotionally invested in their jobs or are merely working to pass the time, whether they have serious interests outside of their families or not, motherhood is a serious, important role which involves much of their thought and energy. That they volunteered to participate in the study is in itself an indication of their interest in their children; they could easily have avoided it.

Since they are a well-educated group of women, they are all familiar with the newer ideas about child rearing and education which have been disseminated widely through all the media of communication. They do differ, however, in the extent to which they have accepted and integrated these ideas, and it is in this sense that they are considered to vary along what we have termed the modern-traditional continuum.

The modern-traditional dimension, as defined in this study, is a complex one. In general, it has to do with the balance between the value placed on conformity, on adaptability to society's codes and standards and the value placed on the individual child's needs, capacities and unique rate of development, both at the attitudinal level and in terms of the adult's enactment of his role vis a vis the child.

This general conceptual framework is embodied in a set of six interrelated characteristics defining the modern and traditional modes of child rearing:[1] investment of authority, responsibility for socialization, meaning of child behavior, childhood as preparation for adulthood, standards of achievement, and codes of behavior. Briefly, traditional mothers place greater value on the child's adaptation to society's demands than on the child's inner needs, point of view, unique rate of development, and believe it is their right and responsibility to train their children to behave in socially acceptable ways. Modern mothers, on the other hand, place greater value on the child's inner needs, motivations, and self-realization, though they are aware also of the necessity of helping the child adapt to certain of society's demands; they conceive of themselves as guides, helping their children gradually to assume authority for themselves.

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[1] Definitions of these characteristics are presented in full in Appendix I.

Perhaps it should be emphasized that the modern-traditional dimension is not all embracing. Aspects of the affectional relationship between parent and child are not included in the conceptual framework, and it is assumed that a number of significant variables cross-cut the modern-traditional dimension.

The main body of this section of the report will describe and compare the characteristics of two groups of families -- those considered clearly traditional and those considered clearly modern in their child rearing orientation. These families have been selected from the larger sample of 102 families involved in the original study. In order to provide a context for this comparison, the sections following immediately will present a description of the procedures used in obtaining and analyzing the parent data for the complete sample, and a review of the research literature on parent-child relationships, with special emphasis on placing the variables of this study in the context of other schema of analysis.

Procedures

Techniques

Two instruments were developed for the purpose of evaluating the modern-traditional orientation of the mothers as well as other aspects of the mother-child relationship:

1. A pencil-and-paper questionnaire[1] containing two sections: (a) a modern-traditional attitude questionnaire which was expected to evoke the mother's more public, conscious ideology with respect to child rearing and education; and (b) a general family background questionnaire including questions regarding vital statistics about the parents, socio-economic-cultural level, the child's developmental history, and miscellaneous questions about the child and the pattern of family life.

2. A semi-structured interview[2] designed to tap the mother's child rearing ideology and practices; other mother-child relationship factors; the mother's qualities as a person and her feeling about the mother role; and the father's role in the family. For the most part, the interview was focused on the present.

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[1] Administered to mothers in groups at the school which their children attended.

[2] Each mother was interviewed individually, usually at her child's school. The interview usually lasted from 1½ to 2 hours. The interviews were conducted by three interviewers.

Measures

The questionnaire provided information on a number of factors concerning the parents and family life, several of which will be dealt with in a later part of this section. The major score derived from the questionnaire, however, concerns the mother's modern-traditional ideology.

The interview was rated on the following dimensions:[1,2]

1. Satisfaction with Child
2. Involvement in Child's Life
3. Integration of Mother Role
4. Consistency of Child Rearing
5. Enactment of Authority Role
6. Emphasis on Standards of Behavior and Achievement
7. Encouragement of Individual Interests
8. Ideology re Child Rearing and Education

The first four dimensions were conceived of as independent of the modern-traditional orientation. The remaining four are critical to the modern-traditional concept, and together with the questionnaire ideology score, were included in a composite rating, along a seven point scale, of the mother's Modern Traditional Orientation. This rating (MTO) was based on the

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[1] A fuller presentation of the component scales of these dimensions and a description of the rating process appears in Appendix II.

[2] The interviews were conducted and analyzed by Elain Graham Sofer, Lillian Shapiro and Virginia Stern.

quantitative scores on these five variables -- which we have called the criterion variables -- as well as a review of relevant qualitative material.[1]

The number of families at each scale point is shown in Table 1.[2]

Review of the Literature on the Parent-Child Relationship

For the most part, research concerned with the influence of the parent-child relationship on the child's personality development and/or behavior has used variables which are similar to, but not identical with those listed above. Investigators in this field have also most often concentrated on the mother-child relationship, as we have, because it has been considered most crucial. Many, however, have done cross-sectional studies at other stages of development, from infancy to adolescence, with much interest in the pre-school period; others have done longitudinal studies. Fewer, but increasingly more, have concentrated on the father-child relationship, particularly on the effect of father-separation or absence from the family; others are concerned with both the mother-child and father-child relationship and, recently, with the differential

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1. See Appendix III for details of procedure for classification of mothers on MTO scale.

2. A more refined breakdown of the distribution of MTO ratings appears in Appendix IV.

Table 1

MODERN-TRADITIONAL ORIENTATION: DISTRIBUTION OF FAMILIES ON SEVEN POINT SCALE

	Modern-Traditional Orientation (MTO) SCALE POINT	Category	N
ALL TRADITIONAL	1	Clear Traditional	5
	2	Predominant Traditional	22
	3	Inconsistent Traditional	14
			(41)
	4	Middle: No Clear Trend	30
ALL MODERN	5	Inconsistent Modern	12
	6	Predominant Modern	13
	7	Clear Modern	7
			(32)
	TOTAL		103 [1]

[1] One mother is entered at two scale points (5 and 6) since her MTO was considered to be at different scale points for her two children.

effects on same-sex, other-sex children. Some are concerned with the influence of family structure -- family composition, number of children, spacing of children, etc. -- others with the pervasive influence of social-emotional interaction among family members. The relationship of social class to child rearing attitudes and methods has been an area of great interest, as well as the influence of occupational or social-character types.

Since our study involves the relationship between middle class mothers and 9-10 year old children, we shall include in our review, for the most part, those studies done during the last decade which are most relevant. We shall discuss in particular the variables most frequently chosen as antecedents and how they compare with the ones we have selected.

The greatest concentration in the field has been on variables associated with parental control, type of authority relationship and amount and areas of autonomy accorded to the child. Our Modern Traditional Orientation variable and its four component dimensions are most closely related to these. Warmth of the mother-child relationship (or "acceptance-rejection," "love-hostility," "affection-support") has been considered by many investigators to be another important mother-child relationship variable. Our Satisfaction variable is most closely related to this. Our remaining variables (Integration of the Mother Role, Involvement in Child's Life, and Consistency of Child Rearing) occur much less frequently in the literature.

We shall review first those studies with control-authority-autonomy variables and attempt to relate them to our MTO variable and its component parts.

Within recent years, there has been much emphasis on the effects of different types of disciplinary techniques on children. Most prominent has been the distinction between "psychological" or "love-oriented" techniques (those which involve the threat of loss of parental love) and "direct," "physical" or "object-oriented" techniques (Aronfreed, 1961; Bronfenbrenner, 1961; Miller and Swanson, 1960; Sears, Maccoby and Levin, 1957). Hoffman and Saltzstein (quoted in Hoffman, 1963) characterize disciplinary techniques, somewhat differently, as those which involve "ego attack" (shaming) and those which indicate disappointment in the child for not living up to expectations, while Hoffman, Rosen and Lippitt (1960) make a combined concept of "parental coerciveness" and "child autonomy." Other elements of disciplinary techniques, e.g., style of rewards and punishment (Miller and Swanson, 1960), reasoning with child, explaining (Aronfreed, 1961), and type of discipline not categorized in any of the above ways (Radke, 1946) have also been used as antecedent variables.

Although the mothers in our sample were asked specifically about the disciplinary techniques they used, we were not concerned with them as such, but only as indicators of the type of authority relationship which existed between mother and child.

Our rating of the mother's Enactment of the Authority Role (one component of MTO) was based on several relevant aspects: punitiveness of control, which other investigators have also considered important (Kagan and Moss, 1962; McCord, McCord and Verden, 1962; Radke, 1946; Sears, Maccoby and Levin, 1957; Winder and Rau, 1962; Witkin, et al., 1962); the extent to which the mother explains the reasons for her demands and restrictions vs. arbitrariness of demands, used also by Aronfreed (1961) and Miller and Swanson (1960); and two other aspects which are very infrequently mentioned in the literature -- the amount of resistance to her demands which the mother accepts and the extent to which the mother allows the child to voice his opinions, make choices and decisions. The latter are, however, similar to Baldwin's (1948) "democracy" factor, which was derived from an analysis of the Fels Parent Behavior Rating scales in a study of the effect of freedom and permissiveness vs. restrictiveness and pressure in the home on young children's social behavior in nursery school.

The effects of socialization techniques, such as toilet-training and weaning, have of course been investigated extensively. We have used this kind of information in a particular way: as an indicator of the mother's allowance of impulse-expression, which contributes to the dimension Emphasis on Standards of Behavior and Achievement.

In other studies, material concerning standards of behavior and achievement is often subsumed under larger categories labelled "permissiveness vs. strictness" (Peterson, et al., 1959; Radke, 1946; Sears, Maccoby and Levin, 1957; and Watson, 1957), "expectations for the child" (McCord, et al., 1962), or "control" (Baldwin, 1948). Weisberg and Springer (1961) have three separate variables similar to this dimension ("parental acceptance of regression," "stress on school performance," "demand for the child to conform to parental values"). Kagan and Moss (1962) evaluated several types of maternal practices, two of which are similar to these: (1) "maternal acceleration," defined as the mother's excessive concern for the child's cognitive and motor development, and (2) "maternal restrictiveness," defined as the mother's attempts to force the child to adhere to her standards. The latter includes channeling the child into activities valued by the mother, regardless of the child's abilities and interests, an idea which is subsumed under our variable Encouragement of Individual Interests.

There is very little in the literature related to parental fostering of the child's individual interests and abilities. Weisberg and Springer (1961), in their study of children's creativity, use a variable called "domination," one of the elements of which is the extent to which parents participate in the child's development and current interests. In their study of psychological differentiation, Witkin, et al. (1962) are concerned with those characteristics of the mother as a person and her ways of interacting with the child which foster or inhibit differentiation. One of their indicators had to do with the extent to which the mother "limits curiosity, stresses conformity," some of the evidence for which came from the mothers' attitudes toward their children's attempts to explore and find things out on their own.

Almost all the studies mentioned above focus on parental behavior alone. Our MTO is a composite of maternal behavior and attitudes. A variety of parent attitude questionnaires has been developed over the years. Some, such as Shaefer and Bell's Parental Attitude Research Instrument (1958), cover many areas of child rearing ideology. Others focus on a particular aspect, e.g., attitude toward control (Centers and Centers, 1963), or attitude toward achievement and independence (Torgoff, 1960), or autocratic vs. democratic ideology with respect to child rearing familial relationships, sex-role (Levinson and Huffman, 1955). Loevinger and Sweet (1961) developed a questionnaire consisting of 200 forced choice items. Cluster analysis of the questionnaire yielded several themes, one of which, called "authoritarian family organization," contains several elements quite similar to those of our modern-traditional ideology. They are: (1) hierarchical family organization, (2) inability to conceptualize inner life, both one's own and that of others, and (3) emphasis on external as opposed to internal controls, particularly of the child's instinctual impulses.

From reviewing the literature, it would seem that the MTO variable, and its component parts, is very much in the mainstream of current research in parent-child relationships. The MTO differs from most, however, in that it combines into one score not only ideology and behavior, but also many other aspects of parental attitudes which, in other studies, are often considered separately or combined in other ways.[1]

Of the four other mother-child variables used in this study, only Satisfaction with Child or some variation thereof ("love-hostility," "warmth," "acceptance-rejection," etc.) appears at all frequently in the literature. The indicator which Witkin, et al. (1962) call "self-realization as a mother" is similar to our definition. It includes the mother's expression of approval-disapproval and her satisfaction-dissatisfaction with the child. It differs, however, in that the content of the qualities approved or disapproved was taken into account, whereas we evaluated the depth of feeling and the number of qualities liked and/or disliked, regardless of content. Kagan and Moss' (1962) "maternal hostility" variable is concerned with the mother's expression of dissatisfaction (to the child or to other adults), as well as active rejection. "Warmth" variables used by other investigators are weighted more toward affectionate interaction and demonstrativeness than is ours (Baldwin, Kalhorn and Breese, 1945; McCord, McCord and Verden, 1962; Sears, Maccoby and Levin, 1957). Winder and Rau's (1962) "ambivalence" is a combined score of affection and rejection. Bronfenbrenner (in Glidewell, 1961) finds the critical variable (with respect to responsibility and leadership) to be the ratio of affection-support to amount and type of authority and control.

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[1] It should be noted that in this study, component scales of the MTO rating are also considered separately for some purposes.

Schaefer (1959), on the basis of a circumplex ordering of several sets of data from other studies, has derived two axes, "autonomy-control" and "love-hostility," which he believes are basic to the mother-child relationship. As indicated above, these two dimensions appear most frequently in the literature, undoubtedly because they are considered the most important. Related variables (e.g., "positive evaluation of the child," "achievement demand," "emotional involvement," "intrusiveness") are arranged in sequential order around these two axes on the basis of the degree to which they are correlated. Although the sequential order differs slightly from one set of data to another, the variables are essentially the same. (Schaefer points out that many variables, also relevant to the development of the child, are not included.) He believes, however, that his hypothetical conceptual model, developed from these analyses of different sets of data may "assist in the interpretation of existing maternal behavior research by suggesting the essential equivalence of diverse conceptual schemes or may help in the selection of variables to be included in future research on maternal behavior. It may challenge investigators to explore new dimensions...rather than to reinvestigate known dimensions with new names" (pp. 233-4).

Radke-Yarrow (1963), discussing methods used in parent-child research, deplores the fact that most research emphasizes topics of authority and control and the affective relationships of warmth-coldness and acceptance-rejection. She feels that "our habitual focus on the same variables in study after study seriously restricts our conception and knowledge of mother-child experiences. It becomes hard to conceive of other dimensions of maternal influence" (p. 216). She notes the absence, for example, of research about the mother's handling of the child's need of an individualized conception of himself.

Our research does include variables outside the realm of control-autonomy and love-hostility, as do a sprinkling of other studies. Integration of the Mother Role is one of these infrequently studied variables. Weisberg and Springer (1961) include "acceptance of the maternal role" in their large roster of variables. Winder and Rau (1962) include "mother's self-esteem," similar to our sub-scale, "confidence in self as a mother." Witkin, et al. (1962) have two indicators, "mother's self-assurance as a person" and her "sense of self-realization in her own life." These encompass more than our variable since they include aspects of the mother outside of the maternal role. In the study by Sears, et al. (1957), the mother's high self-esteem is included in a factor called "responsible child-training orientation," thus removing it from consideration on its own.

Our variable Involvement in Child's Life has no exact parallel in the literature. It includes two underlying themes -- emotional closeness vs. distance and the capacity to understand and relate to the child as an individual. Weisberg and Springer (1961) include a variable called "intensity of mother-child relationship" which presumably is similar to the emotional distance aspect of our variable. Witkin, et al. (1962) do take into consideration the apparent reason for and purpose of the mother's involvement with the child (whether high or low) in determining whether it tends to foster or inhibit differentiation.

Grant and Kantor (1961), in their critical article about research in the area of mother-child relationship, mention the need for measures of inconsistency of attitudes, both within the mother as an individual and between important figures and groups impinging upon the child. Our Consistency of Child Rearing variable is an attempt to fulfill the former need. Of all the studies reviewed, only Winder and Rau's (1962) includes "consistency" in its roster of antecedent variables.

It might be noted also that in our choice of families for detailed study (see following section), the consistency of their attitudes and child rearing practices has been a major basis for selection.

Clear Modern and Clear Traditional Families

In order to clarify the nature of the mother-child relationship in modern homes as compared with traditional homes, those families whose orientation was considered to be either clearly modern or clearly traditional, without strong elements of inconsistency, were selected for further study. That is, those 27 families who were rated as 1 or 2 on the MTO were considered to exemplify the traditional position; those 20 families who were rated as 6 or 7 were considered to exemplify the modern position. The characteristics of these contrasting groups, the ways in which they are similar to and different from each other, form the substance of this section.

Table 2 shows the distribution of these families in the four schools, as well as the percentage of the families in each school falling into these clear categories.[1]

Comparison of Families on Criterion Variables

The clear modern and traditional families were first compared on the five criterion variables of the MTO. Table 3 indicates that they differ significantly on all five. The selection of the groups was, of course, based on scores on these

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1. While somewhat less than half the total sample at Adams, Dickens and Conrad fall into these extreme groups, 61% of the Browning sample does so, suggesting that the Browning mothers, whether modern or traditional, tend to be more consistent.

Table 2

CLEAR MODERN AND TRADITIONAL FAMILIES: DISTRIBUTION OF FAMILIES OF BOYS AND GIRLS IN THE FOUR SCHOOLS

School	Sex of Families' Children	FAMILY ORIENTATION		Percentage of Total School Sample
		Traditional (MTO 1 or 2)	Modern (MTO 6 or 7)	
Browning (Trad. Public School)	Boys	4	0	
	Girls	4	3	
	Total	8	3	61
Adams (Trad. Public School)	Boys	8	1	
	Girls	2	3	
	Total	10	4	41
Dickens (Mod. Public School)	Boys	4	2	
	Girls	4	0	
	Total	8	2	43
Conrad (Mod. Private School)	Boys	0	7	
	Girls	1	4	
	Total	1	11	43
All Schools	Boys	16	10	49
	Girls	11	10	44
	Total	27	20	46

Table 3

CLEAR MODERN AND TRADITIONAL FAMILIES: COMPARISON of MEAN SCORES ON MODERN-TRADITIONAL CRITERION VARIABLES

Modern-Traditional Criterion Variables	Means		Statistical Comparisons	
	Trad. (N=27)	Modern (N=20)	F value[2]	t value[2]
Modern-Traditional Ideology Score (Questionnaire)[1]	62.67	99.0	$2.90^{/}$ Trad > Mod	12.36^{***}
Ratings of Interview Data				
Ideology re Child Rearing	2.56	6.30	1.44	11.33^{***}
Enactment of Authority Role	2.26	5.50	1.60	8.76^{***}
Emphasis on Standards of Behavior and Achievement	2.11	5.10	$2.25^{/}$ Mod > Trad	6.95^{***}
Encouragement of Individual Interests	4.52	7.55	1.04	6.31^{***}

1. Low scores are traditional, high scores are modern for all of these variables.

2 *** = significant at $p= <.01$

$/$ = significant at $p= <.10$

very dimensions. But it should be pointed out that the prerequisite for placement in one of these extreme groups was that a minimum of any three of the five scores be either clearly modern or traditional. Thus, the fact that the groups differ on all the variables suggests not only the high degree of intercorrelation among them but also that no one of the scores contributed unduly to the selection process.

For the most part, both groups are similarly homogeneous on these dimensions. On two scores, however, one group tends to be somewhat more variable than the other (see Table 3). With respect to ideology, as measured by the questionnaire score, there is somewhat greater variability of scores among the traditional than among the modern mothers. In general, questionnaire scores on modern-traditional ideology were skewed to the modern end for the whole sample, perhaps because of the way in which items were phrased, perhaps because mothers tended to respond in the way they thought would be acceptable to the research staff. Of course, it is also true that generally modern attitudes have been given a great deal of prominence in all the media of mass communication, and conscious ideology is more easily affected than behavior.

With respect to emphasis on standards of behavior and achievement, the modern mothers tend to be somewhat more variable as a group than the traditional. This tendency is more difficult to understand. The greater range of scores may be at least partly attributable to differences between mothers of girls and mothers of boys, discussed below.

Mothers of boys and mothers of girls:

In general we assume that patterns of mother-child relationship vary with the sex as well as the age of the child, and we know that the data of this study have shown striking and pervasive differences between the reactions of the two sexes in many areas of functioning. Therefore it seems important to examine the ratings of mothers of boys and of girls separately.

In the traditional group, the mean ratings of mothers of boys and girls are almost identical. But there are significant differences among mothers of the modern group. Table 4 shows the mean ratings of modern mothers of boys and girls on the five criterion variables. Mothers of girls are significantly different from mothers of boys in their emphasis on standards of behavior and achievement, and tend to be somewhat different in their enactment of the authority role.[1] It should be emphasized that these differences are all within the range of modern viewpoints and practices. Though modern mothers appear to be less permissive with boys and to exercise somewhat more control over boys than girls, their reactions are still clearly more modern than those of the traditional mothers.

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[1] In the total study sample of 102 mothers, there was some tendency for mothers of girls to place less emphasis on standards of behavior and achievement than mothers of boys (Analysis of Variance: $F=3.80$; $p=<.10$), though they did not differ in enactment of the authority role.

Table 4

MODERN MOTHERS OF BOYS AND MODERN MOTHERS OF GIRLS: COMPARISON OF MEAN SCORES ON CRITERION VARIABLES

Modern-Traditional Criterion Variables	Means		Statistical Comparisons	
	Mothers of Boys (N=10)	Mothers of Girls (N=10)	F value[2]	t value[2]
Modern-Traditional Ideology Score (Questionnaire)[1]	99	99		
Ratings of Interview Data				
Ideology re Child Rearing	6.10	6.50		
Enactment of Authority Role	4.90	6.10	2.57	$2.02^{\dagger}$
Emphasis on Standards of Behavior and Achievement	4.20	6.00	5.39^{**} (girls > boys)	2.73^{*}
Encouragement of Individual Interests	7.60	7.50		

1. Low scores are traditional, high scores are modern for all of these variables.

2. ** significant at $p = < .02$

   * significant at $p = < .05$

   † significant at $p = < .10$

Since the mothers were not asked directly to describe differences in their treatment of boys and girls, we can only speculate about the meaning of the findings. Taken at face value, they are somewhat surprising. The modern position would seem to imply a lesser differentiation in the expectations and reactions to boys and girls -- a relatively open attitude toward accepting a variety of behaviors from children of both sexes -- while the more traditional position would seem to imply a more conventional concept of the different ways in which boys and girls must behave and the different directions in which they must grow. The fact that the ratings cover the quality of relationship and not the content of expectations may account in part for the findings. It may be that the traditional parents differ greatly in the content of their expectations and standards for boys and girls but not in the pressure they exert on both sexes to live up to these expectations. It is also possible that the modern mothers, in their differential treatment of the sexes, are reflecting an awareness of the different needs of boys and girls. Bronfenbrenner (1961), for instance, has suggested that boys and girls respond differently to similar types of parental discipline, girls tending to be more responsible with a "modest" exercise of parental power and boys requiring more exercise of parental power, though not too much, to respond as responsibly as girls. To understand more clearly these suggested differences in the two parent groups, however, we would need parental data more specifically geared to tapping attitudes toward the two sexes.

Comparison of Families on Non-Criterion Variables

As has been noted above, the mothers were rated on several dimensions which were considered to be important determinants of the quality of the mother-child relationship, though they were not components of the Modern Traditional Orientation. These variables were expected to be independent of the MTO, but, as can be seen in Table 5, there are significant differences between the clear modern and traditional families on three of these four variables. Thus, modern mothers are seen to be more satisfied with their children, more integrated in their roles as mothers, and more involved with their children than the traditional mothers. There is no difference between the two groups with respect to consistency of child rearing. This fact follows logically from the process of selecting this sample, since the consistency of modern or traditional scores -- partly reflected in this dimension -- was a major basis of selection. These two extreme groups taken together are significantly more consistent than the other families of the total sample (t=5.51; p=<.01).

The apparent relationship between the non-criterion variables and the modern-traditional groupings is an unexpected one. It is possible that the relationship is an artifact of the rating system and/or reflects the implicit bias of the raters

Table 5

CLEAR MODERN AND TRADITIONAL FAMILIES: COMPARISON OF MEAN SCORES ON NON-CRITERION VARIABLES

Non-Criterion Variables	Means		Statistical Comparisons	
	Trad. (N=27)	Modern (N=20)	F value^{1}	t value^{1}
Satisfaction With Child	5.37	7.15	2.03	3.18***
Integration of Mother Role	5.30	6.75	2.94** (Trad > Mod)	2.30*
Consistency of Child Rearing	6.22	6.70	1.47	.87
Involvement in Child's Life	4.30	6.35	1.14	4.56***

1. *** significant at $p = < .01$
   ** significant at $p = < .02$
   * significant at $p = < .05$

toward the modern point of view. In analyzing the mother interviews, rating was done on all the scales for each mother, rather than by scale for all the interviews, because it was felt that the gains, both in time and understanding of the mother, would outweigh possible halo effects. It was also felt that awareness by the raters of their possible bias would minimize error. But it is of course possible that unconscious factors intruded.

Other factors may be responsible, however. Our definitions of the modern and traditional points of view may not, and perhaps could not, be parallel. The modern point of view has as its central core the acceptance of the child as an individual, and this carries with it certain implications concerning other relationship aspects. Because the modern mother, by definition, has more flexible standards or expectations for her child, she probably accepts a wider range of child behavior and temperament. It is, perhaps, easier for her to be satisfied with her child (though when she is dissatisfied she may find it more difficult to accept and admit that dissatisfaction to herself or to anyone else). Because of the leeway in what she can accept she has more possibility for deriving enjoyment from her relationship with her child and from the mother role in general. The traditional mother, on the other hand, is most likely to be highly satisfied with her child if he fits her conceptions about child behavior. It he does not, she is apt to feel inadequate as a mother, and less able to derive enjoyment from the mother role.

With respect to Integration of the Mother Role, it can be seen in Table 5 that there is significantly greater variability in the ratings of traditional than of modern mothers. On both the Satisfaction and Integration ratings, in fact, there is a greater range of scores in the traditional group than in the modern. There were traditional mothers who were highly satisfied with their children and traditional mothers who expressed little satisfaction with their children (range of ratings: 1 to 9), whereas the range of satisfaction ratings for modern mothers was smaller, and was skewed toward the upper end of the scale (range of ratings: 5 to 9). This is true also with respect to Integration of the Mother Role, where the ratings of the modern mothers range from 3 to 9, and those of the traditional mothers range from 1 to 9.

If these differences have some validity, it is particularly interesting that these modern mothers have achieved a higher degree of integration than the traditional mothers. They have, by definition, fewer guidelines than the traditional mothers; they need to be sensitive to the child's changing needs, fluid and flexible in their responses and, at the same time, supportive. The traditional mothers, on the other hand, are more able to rely on tried ways of achieving the child's adaptation to society's demands; they have relatively fixed criteria and expectations and in a sense would seem to have a less personally demanding task. It is also true, however, that they are living in a rapidly changing world and in an atmosphere in which other values in child rearing are being recommended by recognized authorities. Their response to this may well have been to question the validity of their approach and to feel less adequate and integrated as mothers.

The mother's Involvement in the Child's Life appears also to be related to the modern-traditional dimension, although it was originally conceived of as independent. Again, this may be part of a generalized halo effect -- an implicit assumption that consistent modern mothers would be more emotionally and intellectually involved with their children, though it would be part of that assumption that greater involvement beyond a certain point does not indicate an increasingly positive quality in the mother-child relationship.

Mothers of boys and mothers of girls:

There are no significant differences between mothers of boys and mothers of girls in either the modern or traditional group on these four variables, or in the total sample. This is interesting in view of the differences we found in the modern group with respect to two of the criterion variables -- Enactment of Authority Role and Emphasis on Standards of Behavior and Achievement. Whatever the reasons for the difference on these dimensions, these reasons apparently do not affect the mother's feeling of satisfaction with children of different sexes, nor the consistency, integration or involvement with which she carries her mothering role in relation to boy or girl children.

Comparison of Families on Background Features and Aspects of Home Life

The family background section of the questionnaire provided information about the parents, the socio-economic-cultural level of the home, the child's early history and other specifics about the family's attitudes and way of life. In order to round out the image of these modern and traditional families, they were compared on a number of the background factors. These factors, it might be noted, were not considered part of the modern-traditional conceptual framework, though we were aware that some aspects, such as infant feeding practices, might very well be related.

Vital statistics:

The parents in both groups are white and, for the most part, native-born.[1]

Parents in both groups tend to be about the same age. The range of mothers' ages in the traditional group is 32 to 46 (Med.=37), in the modern group, 33 to 46 (Med.=39.5). The range of fathers' ages in the traditional group is 33 to 57 (Med.=42.5), in the modern group, 35 to 57 (Med.=43).

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[1] In the modern group, all the mothers and 95% of the fathers are native-born. In the traditional group, 88% of the mothers and 77% of the fathers are native-born.

In the traditional group all of the children are living with both their parents, though in two traditional families the mothers indicated that they were about to be divorced. In the modern group, 80% of the children (N=16) are living with both their parents.

The size of the family tends to be similar in both groups, and ranges from one to four children. Slightly more than three-fifths of the families have either one or two children, but the distribution in the two groups is somewhat different. There is a higher proportion of one-child families in the modern group than in the traditional group (30%, comprising six families, as compared to 15%, comprising four families). The one-child families in the modern group tend to be those in which the parents are divorced (three of the six families), but this is not generally the explanation in the traditional group. In both groups, approximately three-fifths of the children are first-borns. In the modern group, however, half of these (N=6) have had no experience with younger siblings, whereas in the traditional group, almost four-fifths (N=13) have one or more younger siblings.

For both groups, "family" consists only of parents and children. Rarely is there a relative living with the family, and even then, only temporarily.

Socio-economic-cultural level:

In characterizing the sample, a sizeable majority of the families would be described as upper middle class, the remainder as middle middle class. For purposes of comparison, however, a finer classification was desired. A socio-economic-cultural index was constructed, based on a composite sum of scores derived from threefold classification categories -- income, education, and social status of occupation of both parents. In each category, criteria were established for High, Medium and Low groups.[1]

With respect to the general index and the three component categories, it can be seen in Table 6 that at least half the group falls into the High group and (except with respect to income) less than 10% into the Low group.

Table 6 also indicates that there is some relationship between socio-economic-cultural level and the child rearing attitudes and practices of the mothers in our sample. There is a larger proportion of modern families in the High groups, though the difference between the groups attains statistical significance only with respect to status of occupation. Table 7 indicates that the level varies also in terms of school groups, the Adams and Conrad families tending to have higher socio-economic status than the Browning and Dickens families. (Adams and Conrad families contribute three-fifths of the population of

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[1] See Appendix V.

Table 6

SOCIO-ECONOMIC-CULTURAL STATUS OF CLEAR MODERN AND TRADITIONAL FAMILIES

Socio-Economic Cultural Variables	Total Mod. & Trad. (N=47)		Traditional (N=27)		Modern (N=20)			
	N	(per cent)	N	(per cent)	N	(per cent)	X^2	p level
General S-E-C Index								
High	26	(55%)	13	(48%)	13	(65%)		
Medium	17	(36%)	11	(41%)	6	(30%)	1.45	NS
Low	4	(9%)	3	(11%)	1	(5%)		
Income[1]								
High	21	(50%)	10	(45%)	11	(55%)		
Medium	14	(33%)	9	(41%)	5	(25%)	1.25	NS
Low	7	(17%)	3	(14%)	4	(20%)		
Education								
High	24	(51%)	12	(44%)	12	(60%)		
Medium	21	(45%)	14	(52%)	7	(35%)	1.31	NS
Low	2	(4%)	1	(4%)	1	(5%)		
Occupation								
High	33	(70%)	15	(56%)	18	(90%)		
Medium	12	(26%)	10	(37%)	2	(10%)	6.72	$<.05$
Low	2	(4%)	2	(7%)	0	(0%)		

1. Five traditional families did not give the necessary information. Thus the N for the total sample is 42, and for the traditional group, 22.

Table 7

SOCIO-ECONOMIC-CULTURAL STATUS OF FAMILIES IN DIFFERENT SCHOOL GROUPS: COMPARISON OF CONRAD AND ADAMS FAMILIES WITH BROWNING AND DICKENS FAMILIES

Socio-Economic-Cultural Variables	C. & A. (N = 26)		B. & D. (N = 21)		x^2	p level
	N	(per cent)	N	(per cent)		
General S-E-C Index						
High	20	(77%)	6	(29%)		
Medium	5	(19%)	12	(57%)	11.01	$<.01$
Low	1	(4%)	3	(14%)		
Income[1]						
High	16	(64%)	5	(29%)		
Medium	7	(28%)	7	(41%)	5.73	$<.10$
Low	2	(8%)	5	(29%)		
Education						
High	15	(58%)	9	(43%)		
Medium	10	(38%)	11	(52%)	1.03	NS
Low	1	(4%)	1	(5%)		
Occupation						
High	22	(85%)	11	(52%)		
Medium	4	(15%)	8	(38%)	6.56	$<.05$
Low	0	(0%)	2	(10%)		

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[1] Several families did not give the necessary information. The N's for this comparison are: C + A = 25; B + D = 17.

the modern group and Browning and Dickens families three-fifths of the population of the traditional group).

There is no difference between the families of boys and the families of girls with respect to the general socio-economic-cultural index, or the components thereof.

Occupation of mothers:

The modern and traditional mothers have similar work histories. Almost all the mothers have had some work experience. Although a slightly higher proportion of the modern mothers than of the traditional mothers were working at the time of the interview, this difference is not statistically significant. With respect to type of occupation, the groups are similar. Four-fifths of the mothers in both groups are engaged in professions, in the commercial or applied arts or in white collar jobs, but the distribution is slightly different. More modern mothers are in professions than in the field of applied arts, whereas the reverse is true for the traditional mothers. This may mean that more of the modern mothers planned in advance to have a career.

Religious affiliation:

Because three of the schools in the study are public schools, it was not possible to ask directly about religious affiliation. However, in responding to questions on the questionnaire and in the interview regarding the mother's community activities, the child's activities out of school, etc., some mothers did provide spontaneous information about religious affiliation and activities. From this information it was evident that a large proportion of the families was Jewish. It was also interesting to note that a much higher proportion of traditional mothers gave information indicating religious affiliation and activities than modern mothers (see Table 8). While no direct questions were asked, it seems evident from the spontaneous material that more children of traditional families attend religious school or engage in activities connected with religious institutions, and that traditional mothers themselves are more likely to devote their time to organizations with religious affiliations.

Early child rearing practices:

In the late 1940's, when these children were infants, there was a great deal of discussion about the psychological benefits of breast feeding and demand feeding, as opposed to bottle feeding and the rigid training previously recommended by child psychologists, pediatricians, etc. This group of highly educated, relatively sophisticated mothers, whether modern or traditional, must surely have been aware of the trend. As can be seen from Table 9, however, these two groups of mothers tended to treat their babies differently. Modern mothers were more likely to breast feed and feed their babies on demand than traditional mothers. It is interesting to note that in both

Table 8

INFORMATION INDICATING RELIGIOUS AFFILIATION AND ACTIVITIES: COMPARISON OF MODERN AND TRADITIONAL MOTHERS

Religious Affiliation and Activities	Traditional		Modern			
	N	(per cent)	N	(per cent)	X^2	p-level
Information given	20	(74%)	7	(35%)	5.67	$< .02$
No information given	7	(26%)	13	(65%)		
Total	27		20			

Table 9

EARLY CHILD REARING PRACTICES OF
MODERN AND TRADITIONAL MOTHERS

Early Child Rearing Practices	Traditional		Modern		X^2	p level
	N	(per cent)	N	(per cent)		
Breast or formula feeding						
Some breast feeding	2	(7%)	7	(37%)	4.41	$< .05$
Bottle feeding only	25	(93%)	12	(63%)		
Total	27		19			
Type of infant feeding schedule						
Demand feeding	9	(43%)	11	(65%)	6.74	$< .05$
Flexible schedule	3	(14%)	5	(29%)		
Rigid schedule	9	(43%)	1	(6%)		
Total	21		17			
Pick up baby when he cried						
Usually or always	13	(48%)	17	(85%)	5.26	$< .05$
Sometimes or rarely	14	(52%)	3	(15%)		
Total	27		20			

groups there was greater acceptance of demand feeding than of breast feeding.

There was also a difference between the two groups in their tendency to pick up their child and hold him when he cried, as an infant, even when he did not seem to need feeding, changing, burping, etc. The modern mothers were more likely than the traditional to pick up their child "usually or always."

Although these mothers, whether traditional or modern, are, for the most part, anxious to do what is best for their children, the differences between them with respect to the above-mentioned practices are clearly related to their general ideological positions. The modern mothers tend to be more accepting of impulse-expression and more desirous of satisfying these impulses, and the traditional mothers tend to be more oriented toward control of impulses and early training.

Nursery school experience:

Sixty-five per cent of the total group sent their children to nursery school. Of these, there is a higher proportion of modern than of traditional mothers, although the difference between the groups is not statistically significant (see Table 10). In addition, as Table 11 indicates, this difference appears to be related to the neighborhood in which the children were brought up. The Browning families live in a quasi-suburban area of small houses and back yards, where young

Table 10

NURSERY SCHOOL ATTENDANCE: COMPARISON OF CHILDREN FROM MODERN AND TRADITIONAL FAMILIES

Nursery School Attendance	Traditional		Modern		X^2	p level
	N	(per cent)	N	(per cent)		
Attended nursery school	14	(54%)	16	(80%)	2.35	NS
Did not attend	12	(46%)	4	(20%)		
Total	26		20			

Table 11

NURSERY SCHOOL ATTENDANCE OF CHILDREN FROM DIFFERENT SCHOOL GROUPS: COMPARISON OF CONRAD AND ADAMS CHILDREN WITH BROWNING AND DICKENS CHILDREN

Nursery School Attendance	C. & A.		B. & D.		X^2	p level
	N	(per cent)	N	(per cent)		
Attended nursery school	22	(85%)	8	(40%)	8.05	$< .01$
Did not attend	4	(15%)	12	(60%)		
Total	26		20			

children could, presumably, play safely either alone or with siblings or close neighbors. The Dickens families live in a housing development where there are safe play areas suitable for young children. For these families, nursery schools would not appear necessary unless they were particularly interested in the kind of environment and experiences they provide. The Adams and Conrad families live in urban neighborhoods, usually in large apartment houses where close supervision by parent or nurse is necessary when outdoors, and where it is more difficult to find children of the same age living in the same house or close by. For them, a nursery school would seem more advantageous. In addition, parents who intended to send their children to Conrad (the modern private school) may have felt that admission would depend on early entrance into the school. It is probably also pertinent that Adams and Conrad families tended to have higher incomes than the Browning and Dickens families,[1] though this may not have been true when the children were of nursery school age.

Summer activities:

One of the qualities of family (and child) life which we thought would be interesting to know about was whether these nine year old children spent their summers with their families or away from them at sleep-away camp. What do the parents

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1. See Table 7.

2

think is best for these children who spend nine or ten months of the year in an active life at school and, to a great extent, at structured or group activities after school?

Of the total group, almost three-fifths spent the summer (when they were 8-9 years old) with their families -- a great many of them in the country with their parents, some at day camp in the country or in the city, a few traveling, or just at home. About two-fifths went to sleep-away camps.

If we look at the modern and traditional groups, we see that the modern parents are more likely to spend the summer with their children than are the traditional parents (see Table 12). Within each group there is no difference in terms of the sex of the child. The Browning families, however, are somewhat more likely to send their children to camp than the Conrad families (see Table 13). In connection with this fact, it is interesting to note that modern parents are more likely to own or rent a summer home than are traditional mothers (X^2=4.93; p=<.05). This is particularly true of the Conrad parents, as compared with the Adams parents (X^2=3.78; p=<.05), whose incomes are comparable but whose way of life is different. Whether or not the mothers work does not seem to be related to sending the children away to camp. Roughly 60% of the mothers in each group whose children go away to camp do not work.

Table 12

SUMMER ACTIVITIES: COMPARISON OF CHILDREN FROM MODERN AND TRADITIONAL FAMILIES

Child's Summer Activity (Age 8-9)	Traditional		Modern		X^2	p level
	N	(per cent)	N	(per cent)		
Stays with family	12	(46%)	15	(75%)	2.78	$< .10$
Goes to sleep-away camp	14	(54%)	5	(25%)		
Total	26		20			

Table 13

SUMMER ACTIVITIES: COMPARISON OF CHILDREN FROM DIFFERENT SCHOOL GROUPS

Child's Summer Activity (Age 8-9)	Browning		Adams		Dickens		Conrad		X^2	p level
	N	(per cent)	N	(per cent)	N	(per cent)	N	(per cent)		
Stays with family	4	(40%)	7	(50%)	6	(60%)	10	(83%)	C vs D= .55 C vs A= 1.87 C vs B= 2.75	NS NS $< .10$
Goes to sleep away camp	6	(60%)	7	(50%)	4	(40%)	2	(17%)		
Total	10		14		10		12			

Certainty re child rearing:

Although one of the major foci of our study was the content and quality of the mothers' child rearing attitudes and practices, we were also interested in the extent to which these mothers had accepted or broken away from the viewpoints and practices of the previous generation and whether this was related to their sense of certainty about and confidence in what they were doing. Our expectation was that the modern parents would be more likely to have different attitudes from those of their parents and that they would tend to be more uncertain of themselves. Table 14, however, gives a somewhat different picture.

There is a slightly greater tendency for modern mothers to believe that their child rearing attitudes differ from those of their parents, and in this respect our expectations are supported. The two groups are more or less alike, however, in the frequency with which they feel uncertain about their child rearing practices and wonder whether or not they are doing the right thing. Like all conscientious parents, they are sometimes beset with doubts when their children are being difficult or acting in unexpected ways,[1] though the content of the behavior which disturbs them may be very different. When,

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[1] In general, a large proportion of the mothers in the total sample as well as in the selected modern and traditional groups wonder whether or not they are doing the right thing.

Table 14

CHILD REARING PRACTICES AND VIEWPOINTS: COMPARISON OF MODERN AND TRADITIONAL MOTHERS ON SUBJECTIVE SENSE OF CERTAINTY AND ON SHIFT OF VIEWPOINT FROM PREVIOUS GENERATION

Mother's Reactions	Traditional (N=27)		Modern (N=20)			
	N	(per cent)	N	(per cent)	X^2	p level
Certainty re Child Rearing Practices						
Often wonder	7	(26%)	2	(10%)		
Sometimes wonder	17	(63%)	12	(60%)	3.68	NS
Rarely or never wonder	3	(11%)	6	(30%)		
Certainty re Child Rearing Viewpoint[1]						
Relatively uncertain	18	(69%)	6	(30%)	5.49	<.02
Relatively Certain	8	(31%)	14	(70%)		
Shift of Viewpoint from Previous Generation[2]						
Slight	13	(48%)	3	(16%)		
Moderate	6	(22%)	5	(26%)	5.59	<.10
Considerable	8	(30%)	11	(58%)		

1. One traditional family did not give the necessary information for this comparison. Trad. N = 26

2. One modern family did not give the necessary information for this comparison. Mod. N = 19

however, they are asked to indicate how certain or uncertain they feel about the kind of upbringing that is best for children (the question being phrased in terms of viewpoint or ideology), the groups are clearly different. The modern mothers tend to feel more certain of their general position. It may be that they feel more certain because they have broken away from the traditional attitudes of their parents and have consciously chosen another way of bringing up their children, while the traditional mothers, who wish to raise their children in familiar and established ways find themselves uncertain, in the face of new ideas and a rapidly changing world, about their basic position.

Summary

This section of the report has focused on 47 families whose orientations toward child rearing were either clearly modern or clearly traditional, as determined through interview and questionnaire data. The 27 traditional and 20 modern families were selected from a larger available sample on the basis of the clarity and consistency of the mothers' viewpoints. The two groups were described and compared on a number of dimensions. Some of these dimensions were central to the modern-traditional concept, and were criterion variables in rating the mother's Modern Traditional Orientation (MTO). The other dimensions were conceived of as independent of the modern-traditional concept but as important determinants of the quality of the mother-child relationship. The clear modern and traditional groups were also compared with respect to other features of family background and home life: vital statistics on the parents and the family, socio-economic-cultural level, features of the child's early life, etc. In general, there were clear differences between the two groups of mothers with respect to the modern-traditional criterion variables, the non-criterion variables, and some of the background factors. These differences are summarized below.

Criterion Variables

The clear traditional mothers are significantly different from the clear modern mothers on the five criterion variables comprising the MTO score. That is, the traditional mothers are more arbitrary in their enactment of the authority role, place more emphasis on standards of behavior and achievement, are less encouraging of their children's individual interests, and express clearly traditional attitudes about child rearing, both in the interview and on the questionnaire, in contrast to the clearly modern practices and ideology of the modern mothers.

Although the differences only approach statistical significance, there is a tendency toward greater variability in child rearing ideology among traditional mothers, and greater variability among modern mothers in the emphasis placed on standards of behavior and achievement.

Within the modern group, mothers of boys are significantly different from mothers of girls in their emphasis on standards of behavior and achievement, mothers of boys tending to be less permissive than mothers of girls. There is some tendency also for mothers of boys to exert more control than mothers of girls. Within the traditional group, there are no differences between mothers of boys and mothers of girls on any of the criterion variables.

Non-Criterion Variables

There are significant differences between the clear modern and traditional groups on three of the four non-criterion variables. Modern mothers tend to be more satisfied with their children, more integrated in their mother roles, and more involved with their children than traditional mothers. There is no difference between the groups in the consistency of their child rearing practices.

In the traditional group, there is significantly greater variability in the extent of their integration of the mother role than in the modern group.

There are no differences between mothers of boys and mothers of girls on any of these variables in either group.

Background Features and Aspects of Home Life

The clear modern and traditional families are comparable in several basic respects. The ages of the parents, the composition of the family, and the general middle class socioeconomic level are similar, though modern parents tend to have higher status occupations than the traditional.

In other respects the two groups differ. The clear modern and traditional families appear to have given their children different early experiences. The modern mothers tended more to breast feed their babies, to follow a demand schedule rather than a fixed one, and to pick up their babies more readily to comfort them when they cried. In their current lives, the two groups of mothers organize their activities and those of their children somewhat differently. The traditional families seem more involved in religious affiliations and activities than the modern, and they spend their summer leisure differently. The traditional families are more apt to send their children away to camp, the modern families to spend their summers together as a family unit. In terms of their child rearing orientation, the modern mothers feel a greater gap between their attitudes and those of their parents, and on the whole they feel more confident about their general child rearing viewpoint than the traditional mothers, though both groups feel some uncertainty about the enactment of their parent roles.

PART I

B. CHILDREN'S MASTERY PATTERNS: HOME AND SCHOOL AS INFLUENTIAL FACTORS

CHILDREN'S MASTERY PATTERNS: HOME AND SCHOOL AS INFLUENTIAL FACTORS

Patricia Minuchin

Introduction

In the previous section, a group of clearly contrasting modern and traditional families has been described and compared. What of the children who live in these families? In some basic ways all these homes offer their children comparable experiences -- experiences that are part of the middle class, educated American subculture -- but in other important ways the homes we have designated and described as clearly "modern" offer the 21 children who live within them a different experience than that offered to the 27 children who live within the clearly "traditional" homes. Do the children from these quite different kinds of families cope differently, in fact, with the challenges, conflicts and opportunities they face at the middle stage of childhood in which we studied them?

Do they differ, for instance, in their relationships to families and adults: Do children from modern and traditional homes differ in the way they perceive and deal with adults and adult-child relationships? Do they differ in the extent to which family figures and family affairs seem primary in their life orientation?

What if we consider the children's self concepts and feelings: Do children from the modern and traditional homes differ in the development and differentiation of their self-perceptions? Are they different in their attitudes toward their own inner lives and the expression of their wishes and feelings? Do they cope differently with aggressive impulses or feel differently about the expression of anger? Do they differ in their enjoyment and evaluation of childhood -- in their tendency to project pleasure and privilege ahead to the future and to adulthood? Do they differ in their affirmation of sex membership? in the sex typed quality of their attitudes and behavior?

What if we consider their cognitive performance and attitudes: Do the children from these different homes differ in their knowledge and competence? in their style of thinking and expression? in the nature of their motivations, or their conceptions of mastery and accomplishment?

In raising these questions it should be noted that our approach was not completely exploratory nor our expectations completely open. By virtue of the nature of differences in modern and traditional ideology and ways of relating to children, we have had expectations in a number of areas -- though not all -- about the nature and direction of possible differences. Thus, it was expected, that children from more modern environments would perceive adults as more basically receptive of child behavior, would be less concerned with arbitrary adult authority and would feel freer to challenge adults; that they would be developing more differentiated conceptions of themselves, be more aware of their own impulses and less concerned about their expression; that they would tend to value the present rather than stressing and identifying with adulthood and with the future; that they would be less unequivocally committed to prescribed social-sex roles, and to attitudes and behavior considered typical of their sex; that they would be more searching and differentiated, more flexible and imaginative in their thinking, and that they would not define accomplishment primarily by competitive and external standards.[1]

In the course of the original and current studies, a series of measures have been developed which bear at least in part on these questions and ideas. In the following section, the children from the clear modern and traditional homes will be compared on these measures and an evaluation made of the extent to which they differ in their response patterns.

As has been noted in the introduction to the report, however, we are interested not only in the relationship between modern and traditional home backgrounds and child functioning, but in the relative roles of home and school influence and in the effects of congruent modern, as opposed to congruent traditional, home-school backgrounds. In the sections to follow, therefore, the findings are reported for each variable in three ways: findings related to school and sex -- a brief summary of the findings from the original study, in which the total sample was used in assessing modern-traditional school effects, and differences in functioning between boys and girls; findings related to clear modern and traditional homes -- a report of findings from the current project, based on comparison of the children from clear traditional and clear modern homes; findings related to congruent modern and traditional environments -- a report of findings based on comparison of children who live in clearly modern homes and attend modern schools with children who live in clearly traditional homes and attend traditional schools. From these findings, considered in conjunction, an attempt will be made to evaluate relative roles and interactions of the home and school antecedents as they influence child functioning.

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[1] These themes are abstracted from a roster of predictions developed for comparing children from modern and traditional schools. They are applicable in general terms, however, to the comparison of children from modern and traditional homes as well.

There is, of course, a methodological complication introduced by the fact that the school comparisons are based on 105 cases and the home comparisons on 48. It has seemed of value, nonetheless, to base the study of family effects on those children whose homes could be characterized as clear and consistent in either the modern or traditional direction. It was felt that differential effects would be most sharply seen in these children and that the antecedents of those effects, in relation to home factors, could be most confidently surmised.

Other methodological problems might be noted in relation to the data to be presented. At some points, the size of the sample presents a problem. The N of 48 is adequate for total modern-traditional group comparisons. In a number of areas, however, sex differences are important, and the N's involved in sex subdivisions are relatively small. This is especially true in the comparison of congruent groups. Since the sample of congruent cases is generally small, systematic comparison of same-sex congruent groups is not possible. There are problems of sample size also for those measures on which data are available only for a portion of the sample. This is most evident in the area of cognitive material. Since problem solving tasks were given only in the second year of the study, the N of the sample is reduced. In these cases only a limited analysis is made.

The other important methodological problem lies in the partial confounding of home and school antecedent factors. Table 1 presents the distribution of children from modern and traditional homes among the modern and traditional schools.

As can be seen from the table, there is a tendency for childre from clear modern homes to be attending modern schools and those from clear traditional homes to be attending traditional schools. This association exists only among boys, however; the girls are randomly distributed through the schools. Variables reflecting differences between girls from modern and traditional homes, therefore, can be clearly separated from school effects; those

Table 1

CHILDREN FROM CLEAR MODERN AND TRADITIONAL HOMES: DISTRIBUTION BY SCHOOL AND SEX

School	Clear Modern Homes			Clear Traditional Homes			
	Boys	Girls	Total	Boys	Girls	Total	
Browning (Traditional Public School)	0	3	3	4	4	8	
Adams (Traditional Public School)	1	3	4	8	2	10	
Total Traditional Schools	1	6	7	12	6	18	
	(Incongruent home-school background)			(Congruent home-school background)			
Dickens (Modern Public School)	3	0	3	4	4	8	
Conrad (Modern Private School)	7	4	11	0	1	1	
Total Modern Schools	10	4	14	4	5	9	
	(Congruent home-school background)			(Incongruent home-school background)			
All Schools	11	10	21	16	11	27	48

Congruent home and school backgrounds vs incongruent home and school backgrounds:

Total Sample: $x^2 = 4.01$; $p = < .05$
Boys : $x^2 = 8.01$; $p = < .01$
Girls : NS

predominantly involving boys can not.

In the case of the congruent groups, of course, the similar home and school factors are no longer a methodological problem, since the effects of combined and reinforcing home and school influences become central to the comparison.

In the section to follow, the findings are presented under the following headings:

- Relationships to Families and Adults
  - Primacy of Family
  - Perception of Adult-Child Relationships
- Self Concepts and Feelings
  - Self-differentiation
  - Awareness and Expression of Impulse
  - Orientation toward Childhood
  - Social-Sex Role Attitudes and Reactions
- Cognitive Performance and Attitudes
  - Cognitive Performance: IQ, Achievement and Problem Solving
  - Imaginative Expression
  - Attitudes toward Achievement

Findings

Relationships to Families and Adults

Primacy of family[1]

a) Techniques and measures:

The extent to which family figures and themes were central in the child's inner "life space" was assessed from three sources:

Play Session: a session of approximately one and a half hours in which the child selected from a wide variety of miniature toys (people, animals, vehicles, furniture, etc.) to play out and verbalize dramatic stories.

Children's Picture Story Test (CPST): a story telling test similar to the TAT, but consisting of 12 pictures selected for relevance to this age level.

Projective Questions: a series of interview questions tapping the child's emotional experiences (what makes you feel happy? what makes you mad, puts you in a bad mood? do you daydream? do you have feelings you try not to show? what kinds of things make you feel embarrassed or ashamed?)

The measures derived are as follows:

Primacy of family life (Play): a rating[2] of the extent to which play was centered on family figures and themes. (rating 1-3)[3].

Primacy of parent figures (CPST): a count of the presence of parent figures in the stories (range 1-10).

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1. Part II of this report deals more fully with the pattern and correlates of "family primacy." In this section, the focus is on central, selected measures and on the children from clearly modern or traditional backgrounds.

2. All ratings in this study were done on protocols masked for school and sex.

3. In the case of most ratings, the scale increases in the expected direction as implied by the dimension; e.g. higher ratings indicate more family life play. Where there are exceptions, they will be annotated.

Primacy of family (Play, CPST, Projective Questions): a combined rating based on the two measures described above plus the child's tendency to refer to family figures in responding to the projective questions. (rating 1-4).

b) Findings related to school and sex:

Analysis of the total sample on these measures established the general fact that family themes and figures are still prominent in the expressed fantasies and play of children at this age level, though there is considerable variation in the group. Family oriented responses were found to be far more characteristic of girls than boys.

The pattern of response typical of the different school groups proved to be quite complex. Family primacy did not follow along the lines of the modern-traditional school continuum, though there was a consistent pattern of findings that emerged on all three relevant measures: the strongest family orientation occurred among the girls of one traditional school and one modern school (Browning and Dickens); the least involvement with family thema and figures occurred among the children of the most modern school (Conrad). It was also in this modern private school that the boys and girls were most like each other, with the girls generally similar to the boys in the nature of their reactions.

c) Findings related to clear modern and traditional homes:

Table 2 presents the means for the children from clear modern and traditional homes on the three measures of family primacy, and reports the results of statistical comparisons.[1]

There are no general differences between the two groups, taken as a whole, though there is some suggestion on the CPST measure that children from traditional homes are more drawn to dealing with parent figures in their projections. It is actually the girls from the traditional homes, however, who are distinguishable from the other groups, holding a very particular position. They are highest on every measure (exceeding the means of the total sample as well as this subsample). They are significantly more family oriented than the traditional boys on two of the measures (Play and the combined primacy measure), and their difference from the modern girls approaches significance on one of the measures (CPST), though they are higher on all.

The modern boys and girls are relatively similar in the extent to which family responses are prepotent; on no measure are they significantly different. They present a general contrast to the sharp difference in the responses of boys and girls from traditional homes.

d) Findings related to congruent modern and traditional environments:

Comparison of children from congruent modern and traditional homes and schools yields no significant differences. (See Table 2) On these measures, sex differences are important and a comparison

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[1] Table 2 reports the means and the results of statistical comparisons for all the measures considered in this section.

Table 2

MEASURES OF CHILDREN'S RELATIONSHIPS TO FAMILIES AND ADULTS, SELF CONCEPTS AND FEELINGS, COGNITIVE PERFORMANCE AND ATTITUDES: MEAN DIFFERENCES BETWEEN CHILDREN FROM CLEAR MODERN AND TRADITIONAL HOMES AND BETWEEN CHILDREN FROM CONGRUENT MODERN AND CONGRUENT TRADITIONAL HOME-SCHOOL BACKGROUNDS

Measures	Means								Statistical Comparisons				
	Children from modern homes			Children from traditional homes			Children from congruent homes & schools		Comparison children from modern & traditional homes				Comparison children from congruent homes and schools:
							Mod.	Trad.				Sex diff.	
	Boys N=11	Girls N=10	Total N=21	Boys N=16	Girls N=11	Total N=27	(MM) N=14	(TT) N=18	Total: M vs T	Boys: M vs T	Girls: M vs T	within M & T	MM vs TT
Relationships to Families & Adults													
Primacy of family:													
Primacy of family life (Play)^{sg1}	.90	1.30	1.10	.50	1.91	1.07	1.08	1.17	NS	NS	NS	Tg > Tb: t=3.92***	NS
Primacy of parent figures (CPST)	4.18	4.00	4.10	4.81	5.73	5.19	4.29	5.17	t= 1.88⨍	NS	t= 1.82⨍	NS	NS
Primacy of family (Composite)^{sg}	1.64	2.30	1.95	2.00	3.09	2.44	1.86	2.44	NS	NS	NS	Tg > Tb: t=2.60**	NS

1. s = significant sex differences in previous analysis of total sample (Analysis of Variance). Letters g and b indicate higher sex.

*** = significant at p = <.01; ** = significant at p = <.02; * = significant at p = <.05; ⨍ = significant at p = <.10.

Table 2 (cont'd)

Measures	Means								Statistical Comparisons				
	Children from **modern** homes			Children from **traditional** homes			Children from **congruent** homes & schools		Comparison children from modern & traditional homes				Comparison children from congruent homes and schools:
	Boys N=11	Girls N=10	Total N=21	Boys N=16	Girls N=11	Total N=27	Mod. (MM) N=14	Trad. (TT) N=18	Total: M vs T	Boys: M vs T	Girls: M vs T	Sex diff. within M & T	MM vs TT
Perception of adult-child relationships:													
Proj. benevolence of adult attitudes CPST)sg	1.64	1.70	1.67	1.31	2.45	1.78	1.57	1.72	NS	NS	t= 1.92≠	Tg > Tb: t=3.93***	NS
Self Concepts and Feelings													
Self-differentiation:													
Range of self-diff. (D.L.)sg	1.55	1.50	1.52	1.19	1.45	1.30	1.71	1.22	NS	NS	NS	NS	t=2.04*
Quality of self-diff. (D.L.)	1.36	1.40	1.38	1.25	1.45	1.33	1.50	1.17	NS	NS	NS	NS	t=2.06*
Self-differentiation (S.F.S.)sg	3.00	3.10	3.05	2.40	2.45	2.42	3.15	2.18	t= 1.97≠	NS	NS	NS	t=2.37*

Table 2 (cont'd)

Measures	Means								Statistical Comparisons				
	Children from modern homes			Children from traditional homes			Children from congruent homes & schools		Comparison children from modern & traditional homes				Comparison children from congruent homes and schools:
	Boys N=11	Girls N=10	Total N=21	Boys N=16	Girls N=11	Total N=27	Mod. (MM) N=14	Trad. (TT) N=18	Total: M vs T	Boys: M vs T	Girls: M vs T	Sex diff. within M & T	MM vs TT
wareness and ex- ression of impulse:													
wareness of mpulses (P.Q.)	3.18	3.10	3.14	3.19	2.91	3.07	3.21	3.22	NS	NS	NS	NS	NS
ggressive-des- ructive projections Play)sb	.90	.30	.60	1.88	.55	1.33	.62	1.28	t= 2.61*	t= 2.23*	NS	Tb > Tg: t=3.33***	t=1.94⌿
ggression-anxiety[1] P.Q. and S.F.S.)	1.91	1.70	1.81	1.56	1.55	1.56	1.93	1.50	NS	NS	NS	NS	t=1.87⌿
rientation toward hildhood:													
reference for dulthood (S.F.S.)sg	1.70	1.70	1.70	1.40	1.91	1.62	1.77	1.65	NS	NS	NS	NS	NS
dult reactivity Mill. $)	2.00	2.30	2.14	2.31	2.50	2.38	1.93	2.39	NS	NS	NS	NS	NS

[1] Higher rating indicates less anxiety.

Table 2 (cont'd)

Measures	Means								Statistical Comparisons				
	Children from modern homes			Children from traditional homes			Children from congruent homes & schools		Comparison children from modern & traditional homes				Comparison children from congruent homes and schools:
	Boys N=11	Girls N=10	Total N=21	Boys N=16	Girls N=11	Total N=27	Mod. (MM) N=14	Trad. (TT) N=18	Total: M vs T	Boys: M vs T	Girls: M vs T	Sex diff. within M & T	MM vs TT
Adult reactivity (3 Wishes)	1.30	1.30	1.30	1.67	1.55	1.62	1.23	1.59	NS	NS	NS	NS	NS
Fantasies older social-sex roles (CPST)^{sg}	1.09	1.40	1.24	1.19	1.64	1.37	1.07	1.33	NS	NS	NS	NS	t=1.73†
Social-sex role attitudes & reactions:													
Own-sex preference (S.F.S.)^{sb}	2.60	2.20	2.40	2.60	2.55	2.58	2.60	2.59	NS	NS	NS	NS	NS
Sex-typed concerns[1] (Play)^{sg}	1.27	1.90	1.57	1.25	1.36	1.30	1.50	1.28	NS	NS	t= 3.00***	Mg > Mb t=3.50***	NS

1. Higher rating indicates less sex-typing.

Table 2 (cont'd)

Measures	Means								Statistical Comparisons				
	Children from modern homes			Children from traditional homes			Children from congruent homes & schools		Comparison children from modern & traditional homes				Comparison children from congruent homes and schools;
	Boys N=11	Girls N=10	Total N=21	Boys N=16	Girls N=11	Total N=27	Mod. (MM) N=14	Trad. (TT) N=18	Total: M vs T	Boys: M vs T	Girls: M vs T	Sex diff. within M & T	MM vs TT
Cognitive Performance & Attitudes													
IQ & achievement:													
IQ (Kuhlmann-Anderson)	111	127	118	121	115	119	111	122	NS	t=1.81/	NS	Mg > Mb: t=2.10/	t=2.20*
Achievement (Stanford Achievement)	45.18	48.70	46.86	52.56	47.60	50.65	43.79	53.47	NS	t=2.04/	NS	NS	t=3.29***
Imaginative expression:													
Imagination (CPST)^{sg}	2.00	3.20	2.57	2.50	3.55	2.93	2.64	2.83	NS	NS	NS	Mg > Mb: t=2.03/ Tg > TB: t=1.81/	NS
Imagination (Play)	3.20	3.50	3.35	3.13	3.55	3.30	3.23	3.44	NS	NS	NS	NS	NS
Imagination (A.P.)^{sg}	2.55	3.50	3.00	2.38	3.18	2.70	3.00	2.50	NS	NS	NS	Mg > Mb: t=2.26* Tg > Tb: t=2.05/	NS
Imagination (A.P. Titles)^{sg}	2.00	3.30	2.65	2.00	2.50	2.21	2.69	2.13	NS	NS	NS	Mg > Mb: t=2.60**	NS

Table 2 (cont'd)

Measures	Means								Statistical Comparisons				
	Children from modern homes			Children from traditional homes			Children from congruent homes & schools		Comparison children from modern & traditional homes				Comparison children from congruent homes and schools:
	Boys N=11	Girls N=10	Total N=21	Boys N=16	Girls N=11	Total N=27	Mod. (MM) N=14	Trad. (TT) N=18	Total: M vs T	Boys: M vs T	Girls: M vs T	Sex diff. within M & T	MM vs TT
Attitudes toward achievement:													
Achievement fantasies (CPST)[sg]	1.82	2.80	2.29	2.25	3.00	2.56	2.36	2.72	NS	NS	NS	Mg > Mb: t=2.04/	NS
Primacy of external standards (CPST)	1.18	1.70	1.43	1.69	1.91	1.78	1.29	1.89	NS	t= 2.04/	NS	Mg > Mb: t=1.86/	t=2.31*

of girls alone from congruent modern and traditional environments would be theoretically indicated, though the small N's do not permit it. Whether or not congruent environments have a reinforcing effect on girls' reactions, however, it seems quite possible, as the findings suggest, that the home has a more generally dominant and consistent effect in this area than the school.

Perception of adult-child relationships

a) Techniques and measures:

The way in which the child projected his perceptions of the quality of adult attitudes and behavior toward children was assessed from the Children's Picture Story Test (CPST) through the following measure:

> Projected benevolence of adult attitudes and behavior (CPST): a rating of the extent to which there is predominant emphasis on the socializing, non-supportive, disapproving aspects of adult behavior with children as opposed to the nurturing, affectionate aspects (rating 1-4). The lowest rating had supplementary annotations, including a notation to indicate particular stress on authoritative, impulse-controlling or punitive adult relations with children.

b) Findings related to school and sex:

In the previous analysis of the total sample, it was found that the children tend to portray adults who are controlling and disapproving more frequently than adults who are nurturant and affectionate. These nine year olds in general used the fantasy situation not so much to reflect the benevolent aspects of their life environments and the supportive aspects of their experiences with adults, but more to express conflicts and explore situations that produce discomfort and need to be coped with. In this general trend there were sex differences, however, with the girls more inclined to portray benevolent and nurturant adults. The pattern of school findings was similar to that concerning family primacy: the girls of the one traditional and one modern public school were most benign in their projections, and the girls and boys of the modern private school were most alike in their reactions.

c) Findings related to clear modern and traditional homes:

As table 2 indicates, the findings on this dimension are similar to those concerning family primacy: the girls from traditional homes have the greatest tendency to stress benevolent and nurturant qualities in their projection of adult figures, with a mean rating higher than all means of the study sample,as well as of the subsample considered here. They are rated significantly higher than traditional boys and approach statistical significance in their distinction from modern girls. The traditional boys, it might be noted, rate lowest. Inspection of the ratings indicates also that they tend more than any other group to stress the socializing and pressuring aspects of adult attitudes: 6 of the 16 traditional boys are annotated for their stress on this quality, as opposed to 1 of the 11 modern boys and none of the traditional girls. Modern boys and girls are again relatively close in the quality of their projections.

d) Findings related to congruent modern and traditional environments:

Comparison of congruent modern and traditional groups is non-significant.

In the measures reflective of the children's relationships to family and adults, the major findings suggest: 1) that girls of this age from traditional homes are more oriented in their inner lives to family figures and matters of family life than either the boys from similar backgrounds or the boys and girls from modern homes, and that they tend to express a more benign vision of adult interaction with children; 2) that boys and girls from clearly modern homes tend to be closer to each other in their perception of the adult-child world than traditionally reared boys and girls; and 3) that in this area of perception and reaction the home antecedents are probably more powerful than the school. Analysis of the relationship between the children's responses and the modern or traditional quality of the home has contributed significantly to the clarification of the previous findings: school related findings did not reflect consistent modern-traditional groupings, whereas the pattern of relationships to home background is more coherent, especially in establishing the traditional backgrounds of the girls most involved in family and most benign in their projections of adults. In the case of children from modern homes and the modern private school, patterns of reaction may well be multi-determined, since these groups hold consistent positions in both the home and school oriented analyses.

There is some suggestion in these data that the boys in general and the girls of the clearly modern homes are somewhat freer to move out from the family and to explore and challenge the adult world than the girls from the clearly traditional homes. While the benign projections of the traditional girls may reflect the realities of their lives, it seems possible that they are projecting a limited and defensive, rather than realistic, world. Comparison of their families has not suggested that they are basically more supported or appreciated. Their dependency, however, may be more fostered in these homes. They may tend, thus, to base more of their security on obvious forms of adult nurturance and to feel less free to explore and express the conflict in relationships which is to some extent inevitable as children grow. The traditional boys appear more realistic and vigorous in their projections, though perhaps excessively pressured and correspondingly resentful.

Self Concepts and Feelings

Self-differentiation

a) Techniques and measures:

The extent to which the child perceived and described himself in differentiated terms was assessed from two semi-projective techniques:

Dictated Letter (DL): a technique in which the child is asked to imagine that he has a pen pal in a foreign country to whom he is writing for the first time. He is asked to dictate a letter about himself and his life.

Stick Figure Scale (SFS): a technique in which the child is presented on each item with 2 stick figures, drawn at opposite sides of the page, which represent contrasting qualities along some dimension of self description. He is asked which one is more like himself and then requested to draw himself in. There are 10 items.

The measures are as follows:

Range of self-differentiation (DL): a rating based on the number of categories into which material could be coded (basic descriptive facts, activities and functions, preferences and feelings, memories, plans, etc.), (rating 1-3).

Quality of self-differentiation (DL): a rating based on the tendency to go beyond basic descriptions of facts and activities (rating 1-2).

Self-differentiation (SFS): a rating based on the tendency to make gradations of judgment along the continuum defined by the two figures. The most differentiated approach was defined as that in which the child used a variety of gradations as he moved from item to item (rating 1-4).

b) Findings related to school and sex:

In analyses of the total sample, there was a consistent pattern of difference between children of the modern and traditional schools. Children of both modern schools described themselves in more differentiated ways on the Stick Figure Scale, covered a broader range and dealt with more varied qualities in describing themselves on the Dictated Letter. The girls were more differentiated than the boys, but the findings of school differences was based on the functioning of both sexes and included the children of both modern, as opposed to both traditional, schools. It was considered that these differences, measured in these ways, reflected a style of differentiated cognition applied to the self as a legitimate object of perception and thought, and that both the style of thinking and the stress on self awareness and perception were more characteristically encouraged by the modern schools than the traditional.

c) Findings related to clear modern and traditional homes:

As Table 2 indicates, the means of the children from modern homes are consistently higher, but the differences do not generally reach statistical significance. The single exception is the Stick Figure Scale measure, where the comparison of total modern and traditional groups approaches significance. In general, however, the family factor does not in itself seem decisive.

d) Findings related to congruent modern and traditional environments:

Comparison of congruent groups (Table 2) shows significant differences on all measures. Children from consistently modern backgrounds tend to perceive and describe themselves, as had been expected, in more differentiated terms than those from consistently traditional backgrounds.

There is here apparently a reinforcing effect. Given the clear school difference results, however, the data suggest that the schools have had a particularly influential effect -- perhaps because these measures reflect not only matters of self emphasis and awareness but a factor of self oriented cognition as well.

Awareness and expression of impulse

The children were rated in regard both to their general awareness and description of their emotional experiences, in specific regard to their handling of anger and its expression.

a) Techniques and measures:

The measures were derived from the Projective Questions, the Stick Figure Scale and the Play Session, all of which have been described above. The measures are as follows:

Awareness of impulses (Projective Questions): a general rating of the extent to which the child, in his responses to these questions, seemed aware of his feelings and able to communicate their quality in a personal and expressive way. (rating 1-5).

Aggressive-destructive projections (Play): a rating of the incidence of aggressive-destructive themes (war scenes, battles with animals, fires, etc.) in the play session (rating 0-3).

Aggression-anxiety (Projective Questions and SFS): a combined rating of the extent of anxiety connected with the expression of aggression. On Projective Questions, the child was rated on the extent to which he indicated conflict and concern over the problem of expressing and controlling anger; on the SFS, the child was coded for his response when asked whether he was more like a child who "tries not to lose his temper, feels a little worried and uncomfortable when he does blow up or yell" or a child who "feels better when he blows up and lets people know he's mad, doesn't mind doing it." Ratings from the

two sources were combined into an overall rating (rating 1-3).
Note that on this measure the ratings are reversed: the high rating indicates less anxiety over aggressive expression.

b) Findings related to school and sex:

In analyzing the total sample, no reliable school or sex differences emerged for the general measure of awareness of impulses, though there was suggestive evidence that boys tend to block on such material more than girls, and there was also a significantly greater variability within the modern private school group (Conrad) than within the others, suggesting that these children tended to be either exceptionally blocked or particularly able to share and describe their emotional experiences.

On the measure of aggressive-destructive projections, there were very strong sex differences, with boys tending to play out such themes more than girls. This distinction between the aggressive projections of boys and girls was least evident, however, in the group from the most modern school. Though the means of boys from traditional schools were higher than those from modern schools, modern-traditional school group differences were not demonstrated at statistically significant levels.

On the measure of aggression-anxiety, there were no sex differences but there were clear differences between the school groups. It was generally true that the children of this sample showed some concern with the problem of controlling anger -- a constant and realistic problem as the individual in this society becomes gradually socialized. In keeping with the direction of expectations, however, the children of the modern schools showed significantly less anxiety and concern over their own aggressive expression than children of the traditional schools. This finding was carried predominantly by the children of the modern private school.

c) Findings related to clear modern and traditional homes:

On the general impulse-awareness measure, as Table 2 indicates, there are no reliable differences between children from modern and traditional homes. Variability of reactions within the groups appears to be broad and, as in the school analysis, no consistent effect emerges.

In the specific area of aggression and aggression-anxiety, however, there are clear relationships established. In terms of aggressive-destructive projections, it is the boys from traditional homes who are highly aggressive in their expression. (See Table 2). They exceed the traditional girls and the modern boys and girls at statistically significant levels. Though the traditional and modern groups, taken as a whole, are significantly different, the difference is carried essentially by the distinctive reactions of the traditional boys.

In relation to aggression-anxiety, the means of the modern boys and girls suggest that they are less concerned than the traditional group with aggressive expression, but the differences are not significant. It might be noted that on another measure, where attitudes to school authority were categorized as rational, passive-conforming, resentful or rebellious, the traditional boys were significantly more passive-conforming than the modern boys ($X^2 = 4.24$; $p < .05$), passive-conformity categorizing 12 of the 16 traditional boys but only 3 of the 11 modern boys. The modal response for the latter was a "rational" attitude, characterizing particularly the boys from modern homes and the modern private school.

d) Findings related to congruent modern and traditional environments:

On comparison of home-school congruent groups (see Table 2), measures of aggressive projection and aggression-anxiety are both suggestively significant. Children from consistently traditional environments, particularly boys, show more projected aggression and more aggression-anxiety than children from modern homes and schools.

As has been noted above, it is particularly difficult in this sample to estimate relative roles of home and school antecedents for those variables where major differences reside in the boys, since the factors are confounded. In this case, the aggressive-destructive force that comes through in play must reflect a good deal of the home influence, since differences are only suggestive when school groups are compared but dramatically evident when boys from clear traditional homes are seen in relation to other children. Since the bulk of these boys also attend traditional schools, however, we probably see the combined impact of the relatively pressured and strongly socializing environments within which they live both at home and at school.

In the case of expressed aggression-anxiety, however, the school philosophy appears to play an important role. In these data, though there is also a congruence effect, the school influence is more clearly demonstrated than that of the home. It might be noted that in this specific area the contrasting school philosophies are especially clear to the children, with aggressive behavior and angry discharge particularly taboo in the traditional school setting but far less so in the modern schools. It seems logical that this contrast should be influential in shaping the strength of aggression-anxiety, particularly as expressed in an interview conducted at school.

The major findings in this area suggest 1) that there are differences between children of modern and traditional backgrounds in the particular impulse area of aggression, with less aggression and less aggression-anxiety associated with modern backgrounds; 2) that the difference in aggressive expression is carried actually by the boys from traditional backgrounds, who seem to feel especially pressured and explosive, who are able to discharge their feelings through some channels (e.g. indirectly through play), but who are anxious about expressing this anger and struggle more to make a passive-conforming adaptation — at least in school — than children from more modern and impulse-accepting backgrounds; and 3) that home influences contribute more clearly to the nature and expression of aggressive-destructive feelings, while school influences more clearly affect the child's attitude — his relative anxiety or tolerance — toward his own anger and its expression. Home and school, where congruent, however, appear to have reinforcing effects on both these aspects.

Orientation toward childhood

a) Techniques and measures:

The tendency of the children to value childhood and to react in characteristically childlike rather than adult terms was assessed from the Stick Figure Scale, the CPST and two hypothetical questions embedded in the interviews — the Million Dollar question, in which the child was asked how he would spend a million dollars if they were suddenly available to him, and the Three Wishes question, in which the child was asked to make up three wishes.[1]

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[1] A question asking the children directly what is the "best age to be" was included in the interview and yielded significant findings when analyzed for the larger sample. It was not given to all the children, however, and since the N from clear modern and traditional homes was unevenly reduced, this material is not presented here.

The measures are as follows:

Preference for adulthood[1] (SFS): a coding of child's response when asked whether he was more like a child who "thinks it will be wonderful to be all grown up -- that will be the best time" or a child who "thinks it was really best when he was a little kid" (rating 1-3).

Adult reactivity (Million Dollars): a rating of the extent to which the child's fantasied ideas about spending the money are relatively adult-like in their orientation (savings, investments, gifts and charity, household equipment, etc.) rather than childlike (toys, food, pets, entertainment, child equipment, etc.),(rating 1-3).

Adult reactivity (Three Wishes): a rating of the extent to which the child's wishes are relatively adult rather than childlike; similar in quality to the Million Dollars rating (rating 1-3).

Fantasies of older social-sex roles (CPST): a rating of the extent to which themes or facts related to older social-sex roles (love, marriage, dating, having children, etc.) occur in the stories (rating 1-3).[2]

b) Findings related to school and sex:

Analysis of the total sample yielded both sex and school differences. There was a tendency for girls to be more oriented toward adulthood, especially in their verbalized evaluations of the desirability of being older rather than younger, and in their greater tendency to fantasy around themes of older social-sex roles, though this orientation was less typical of the modern than of the traditional girls. Differences between the school groups were clear, and centered on the difference between children from the most modern school and those of the traditional schools. The children from this modern private school, in particular, were more invested in and identified with childhood, while children from the traditional schools were more actively involved in aspirations toward the future and toward the power, status and privileges of adulthood.

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[1] Though this general variable is conceptually centered on orientation toward childhood, measures are titled in terms of adult orientation since scoring followed the age implications, with higher scores assigned to more adult orientation.

[2] This rating is also relevant to the next section: Social-sex role attitudes and reactions.

c) Findings related to clear modern and traditional homes:

Though there is some consistent tendency for the means of children from traditional homes -- especially girls -- to be higher (less oriented to childhood), the differences do not reach significance on any measure (see Table 2). The home factor in itself does not seem decisive.

d) Findings related to congruent modern and traditional environments:

On one measure, fantasies of older social-sex roles, the data suggest that the combined effect of a modern home and school background is distinct from that of a traditional home and school background. Actually, no child from a clearly modern home who attends the modern private school deals with this kind of theme in his or her stories, but in this they are principally different from the girls of the consistently traditional backgrounds, who show more involvement in fantasies of this kind. On the other measures, which have no social-sex role element, congruence comparisons are not significant.

In this area, the school seems to be of particular importance in shaping the investment of the child in his childhood status, and the childlike or adult quality of his orientation and reaction patterns. This effect may be traceable to the clear differences in school philosophy and orientation, in that the modern school values the child's current work, interests, thoughts and feelings as important in themselves, while the traditional school stresses training for a more responsible and important future.

Social-sex role attitudes and reactions

a) Techniques and measures:

The extent to which the child unequivocally preferred his own sex role and the extent of sex typing in his reactions were assessed through the Stick Figure Scale and Play Session.[1]

The specific measures are as follows:

Own-sex preference (SFS): a coding of the child's response when asked whether he was more like a child who thinks "boys have the most fun and the best life" or like a child who thinks "girls have the most fun and the best life" (rating 1-3; 3 indicates "own sex" choice)

Sex-typed concerns (Play): a rating of the extent to which the child's play was exclusively concerned with content considered typical for the sex (rating 1-2). Note that on this measure the ratings are reversed; the high rating indicates less sex-typing.

Other measures, which have been reported in previous sections, are also relevant to this constellation and will be briefly reviewed. They include fantasies of older social-sex roles (CPST), and the measures of family primacy and of aggressive-destructive projections. The latter are included because they are generally considered "typical" of one sex or the other -- family involvement as typical of girls and aggression as typical of boys.

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[1] The children were also asked directly in interviews which was the "better sex to be," but responses were so heavily skewed toward "own sex" choices that general comparisons were not made, beyond noting that the few exceptions to this trend were all girls.

b) Findings related to school and sex:

In the total sample, there was a clear general trend toward affirmation of the value of one's own sex membership, and a tendency toward sex-typed reactions and behavior. This was particularly true of the boys. It was the girls who were more apt to question and hold open views, less apt to be sex-typed in their concerns.

There was some variation in attitudes, however -- and in the commitment and behavior of boys and girls -- as a function of the variation in schools. Though statements of actual preference for the opposite sex role were rare and were not systematically related to a particular background, there was a distinction between children whose stated commitment was unequivocal and those who maintained relatively open attitudes (mixed or middle choices): unequivocal assertions were associated with traditional school backgrounds and more open attitudes with modern school background, especially for girls. Sex typing in play did not follow exact modern-traditional groupings, even among the girls, but the girls from the most modern school were least sex-typed in their concern and most distinct from the boys of the group in this respect.

As has been noted previously, there was a suggestive tendency for the girls of the traditional schools to fantasy more in terms of older social-sex roles than other children, perhaps somewhat precociously

In regard to other reaction patterns generally considered "sex typical": there was some tendency for modern school boys to be less aggressive than traditional school boys and less distinct from the girls in their reactions, though some aspects of the findings were suggestive rather than conclusive; there was no clear relationship between family primacy and the modern-traditional school groupings, though the girls of the most modern school tended to be atypical of their sex, in terms of the expected sex-linked pattern, and more like the boys in their reactions.

c) Findings related to clear modern and traditional homes:

In statements of own-sex preference (SFS), the general means, as reported in Table 2, would suggest that there is no difference between children from clear modern and traditional homes. These means, however, include a small number of children (6) who made "opposite sex" choices, and who appear in both groups. If a comparison is made between the children whose statements were unequivocal as opposed to open (middle choices), as was done for the school groups, the statistical findings tend toward significance ($X^2 = 3.29, p < .10$): the unequivocal assertions come from traditionally reared children and the more open -- though not rejecting — attitudes appear in children from clearly modern homes.

Findings regarding sex-typing in play, as indicated in Table 2, are very clear. They reside in the particular position of the girls from clear modern homes, whose means are especially high, thereby indicating less sex typing, and who are significantly different both from the traditionally reared girls and from the boys. There is, in fact, only one of the 10 girls from these homes whose play is rated as exclusively sex-typed in quality. The relationship to home background, taken separately, is clearer in this respect than the relationship to school background.

In regard to the other relevant measures: girls from clear traditional homes have the highest means in relation to fantasies of older social-sex roles but, as in the school findings, the differences are not statistically significant. In regard both to aggressive expression in boys and family orientation and dependence in girls, however, the relationships of these constellations to traditional home backgrounds is extremely clear, as has been noted in previous sections, for the sex for whom such reactions are considered "typical." In both these latter constellations, the home antecedents have been demonstrated more clearly than the school antecedents.

d) Findings related to congruent modern and traditional environments:

On some of the measures considered, comparison of groups from congruent modern and traditional environments shows a statistically significant effect. The congruence comparison reported on Table 2 for own-sex choices (SFS) is not significant, but a comparison which eliminates "opposite sex" choices indicates a clear association, with children of combined traditional backgrounds significantly more unequivocal than children from combined modern backgrounds ($X^2 = 4.99$; $p < .05$). The openness of expressed attitudes toward the advantages of different social-sex roles seems to be shaped by both home and school.

Likewise, in the fantasies of older social-sex roles, it seems to be the reinforcing effects of congruent home and school backgrounds that most reliably separate the groups: children -- girls, principally -- from congruent traditional backgrounds tend more to such fantasies, while the boys and girls from congruent modern backgrounds have almost no tendency to explore these fantasies.

The other measures involving girls suggest that the home factor is clearly the more decisive. The aggression of the boys seems also more rooted in the home constellation, though probably intensified for some boys, in one direction or the other, by school attitudes consistent with those of their homes.

The major findings in this area suggest: 1) that social-sex role attitudes and sex-typed concerns and behavior are clearly related to modern and traditional backgrounds, with more open attitudes and less sex-typed behavior associated, as expected, with more modern antecedents; 2) that girls from modern backgrounds tend to be less committed in their attitudes toward their own sex role than the other children, and less sex-typed in their concerns and behavior; 3) that certain areas of reaction considered more typical of one sex (aggression in boys and family orientation and dependence in girls) are clearly more evident in traditionally reared children of that sex; and 4) that the influence of home antecedents on this area of development has been so more clearly and consistently demonstrated than the influence of school antecedents. This is true principally at the level of sex-typing in behavior and orientation rather than at the attitudinal level; the tendency to unequivocal vs. exploratory attitudes appears to clearly reflect the school orientation as well. It also seems likely -- and some of the congruence comparisons reflect this -- that school philosophies which are clear and congruent with the attitudes of these clear homes, in either the modern or traditional direction, reinforce the impact of the home. The fact, for instance, that girls from clear modern homes and the most clearly modern school typify the pattern described here tends to support this idea, though it is difficult to demonstrate statistically on this sample.

Cognitive Performance and Attitudes

Questions related to cognitive performance and attitudes are of obvious importance in relation to children of this age. It can be assumed that school attitudes toward learning and techniques for teaching must influence the child in crucial ways, and it also seems likely that attitudes and relationships in the home would tend to influence aspects of the child's motivation, performance and conceptions in the area of learning and mastery. It would be highly desirable to clarify the home and school roles in this area. Unfortunately, however, our data provide less opportunity for assessing the role of clear modern and traditional homes in this area than in the others we have considered. Basic data related to problem solving style and performance are somewhat limited for the total sample, since it was possible to give the relevant tasks to only 65 of the 105 children, and are even more limited for the subsample considered here, with data available on only 33 of the 48 children. Particularly since the attrition is erratic, reducing the N of girls from modern homes and boys from traditional homes more than the other groups, it is inadvisable to attempt statistical comparisons on those dimensions with limited data. In the following section, therefore, only those dimensions on which full data are available will be considered systematically.

Cognitive performance: IQ, achievement and problem solving:

a) Techniques and measures:

Two IQ tests (the Kuhlmann-Anderson and the WISC Performance Scale), the Stanford Achievement Test (SAT), and 4 problem solving tasks were administered to the children, yielding IQ scores, achievement scores and ratings on the style of cognitive approach and the ability to solve problems accurately. Of these techniques, however, only the KA and the SAT data are available on all the children.

b) Findings related to school and sex:

Clear school-related IQ differences were found on the KA, where children from traditional schools received the highest scores and children of the modern private school scored lowest, but not on the WISC Performance Scale, where the school groups were equivalent. It was considered unlikely that the children from the different schools actually differed in basic intellectual ability; the different findings from the two tests suggested, rather, that the children from the modern private school in particular do poorly in response to timed, written, group tests, are particularly influenced by the interest factor of a task, and have a distinctive pattern of cognitive strengths and deficits.

On the SAT, children from the traditional schools again scored significantly higher than the children from modern schools, with the children of all public schools scoring higher than the children from the modern private school. The latter finding was considered a reflection of the differing emphases and content in the private school curriculum at this educational stage.

On the problem solving tasks, there were no clear general differences between the modern and traditional school children, though there had been an expectation that the modern school children, by virtue of the nature of their schooling, would show more exploratory and connective thought processes in their attempts at problem solution than the children of the traditional schools. It should be noted that the children from the modern private school, though they tended to rank last in individual problem solving, functioned extremely well in a group problem solving task, working most cooperatively and with the greatest technical effectiveness.

c) Findings related to clear modern and traditional homes:

Table 2 presents the findings for the two measures on which full data are available. In general, there is no association of performance with clear modern or traditional homes. Though there is some suggestive evidence that boys from the clear modern homes tend to do relatively poorly on the achievement tests and on the timed, written, group intelligence test, it is clear on inspection that these effects are due almost exclusively to the boys who also attend the modern private school.

d) Findings related to congruent modern and traditional environments:

On both the measures considered, congruence effects are significant (Table 2). They are not more powerful than the demonstrated school effects, however, and the weight of evidence on these measures is that the children who have shared particular educational experiences tend more reliably to perform alike than those who have shared a particular kind of home life, per se.

In this area, as has been noted, most of the school-related findings described above cannot be weighed against home influence on the basis of this subsample of children from clear modern or traditional homes. The measures that can be compared, however, point to the powerful role of the school in shaping cognitive performance.[1]

Imaginative expression

a) Techniques and measures:

The extent to which the child's responses were imaginative in quality was assessed from the CPST, the Play Session and a test of Aesthetic Preferences. The first two techniques have been described previously, and a description of the third follows:

> Aesthetic Preferences: a technique in which the child was shown postcard reproductions of predominantly contemporary painting and sculpture (abstracts, human figures, still life, etc.), unidentified by name or artist and generally unfamiliar to him. He was asked to sort them in terms of preferences, discuss his reasons, and make up a title for each of the pictures.

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1. It might be noted, however, that analyses using the fuller sample have suggested an aspect of cognition that does reflect both home and school influence. Cognitive styles and skills generally associated with a particular sex were found, at a suggestive level, to be more clearly sex-linked among children from traditional backgrounds, and both home and school appeared influential in shaping this tendency.

A measure of imagination was derived from each of these techniques. Though cues were specific to the technique, general principles of rating were similar, stressing the degree to which the child transcended descriptive levels and went beyond specific elements of the stimulus to invest his responses with reactions and elements that were clearly part of his own invention.

Imagination on the CPST was rated on the basis of elaboration - creation of characters not depicted; development of feelings, thoughts, motives; inclusion of imagined events; meaningful details; humor, literary devices, language usage, etc. (rating 1-5).

Imagination in Play was rated for originality of story and the vividness with which the plot was acted out (rating 1-5).

Imagination on the Aesthetic Preferences was rated on the basis of stimulus transcendance, range and differentiation of responses, evidence of "spark" and humor (rating 1-4).
A specific rating of imagination in creating titles was based on the presence of elaborative and interpretive reactions rather than formal description (rating 1-4).

b) Findings related to school and sex:

Consistent sex differences were found on these measures, with girls tending toward the more imaginative responses. There were no school differences demonstrated on these measures, though there had been an expectation that the children from the modern schools would be more imaginative in their expression of fantasies. On inspection of fantasy content, there were differences noted in the fantasy concerns, with the modern school children more involved in the magical and fantastic, the traditional school children more oriented toward success, fame, and concerns of the future, but general group trends in the tendency toward imaginative expression were not noted.

c) Findings related to clear modern and traditional homes:

Findings based on these measures do not suggest general modern-traditional differences (Table 2). The general tendency of the girls to elaborate more and to give more from within their own fantasy world is again the clearest trend. Though this sex difference appears in both the modern and traditional groups, it is more recurrent in the modern group. The specially imaginative reactions of the modern girls to the Aesthetic Preferences situation may reflect the probability that children from modern homes are more exposed to art in general, and modern art in particular, and this exposure may take root and rouse interest more in the girls than the boys.

d) Findings related to congruent modern and traditional environments:

None of the congruence comparisons yield significant differences.

Comparison of children from clear modern and traditional homes has not contributed significantly to the understanding of the antecedents of imaginative expression, as we have measured it, except perhaps in the very particular area of creative reactions to artistic stimuli. Though there are many leads to pursue --

in terms of the adequacy of these measures, the possibility that effects are bi-modal, the suggestion that content and value systems implicit in fantasy concerns are actually the dimensions along which these groups are distinguishable -- the quality of imaginative expression, as measured through the tendency to transcend the stimulus and express inner fantasies, does not show a clear and consistent relationship in this sample either to school or home orientation.

Attitudes toward achievement

a) Techniques and measures:

The extent and quality of the child's achievement concern was assessed projectively through the CPST. The following measures were derived:

Prevalence of achievement fantasies: a rating based on the McClelland-Atkinson definition (McClelland, Atkinson, et al., 1953), stressing themes and imagery concerning "competition with a standard of excellence" (rating 1-5).

Primacy of external standards: a rating of the extent to which fantasies stressed external and tangible criteria for the evaluation of learning adequacy and academic accomplishment (adult judges, tests, formal marking systems, etc.) (rating 1-3).

b) Findings related to school and sex:

For the total sample, there was a general sex difference, with girls significantly more prone to project achievement imagery and suggestively more apt to be concerned with external standards of evaluation.

On both measures, the ratings of the school groups followed modern-traditional lines, with traditional school children most involved in achievement fantasies and external evaluation and children of the modern private school least involved. Only on the latter measure, however, were the differences significant. It was most clearly in terms of their orientation toward the external judge and criterion that the children of the traditional schools differed from the other children.

The boys and girls from the modern private school presented somewhat distinct patterns: the boys showed little evidence either of achievement fantasies or of orientation toward external criteria; the girls of this school, however, ranked with the other girls in their achievement fantasies (being significantly different from the boys of their group in this respect) but were less apt to project fantasies concerning people or situations that judged their adequacy.

c) Findings related to clear modern and traditional homes:

As Table 2 indicates, there is again a general trend for girls to be higher than boys and for children from traditional homes to be higher than those from modern homes. Significant differences appear only in relation to the low ratings of the modern boys, however; differences between modern girls and boys are suggestive on both measures, and those between the modern boys and traditional children are suggestive on the primacy of external standards.

d) Findings related to congruent modern and traditional environments:

Congruence effects appear in relation to the primacy of external standards (Table 2). In relation to this orientation, school philosophy has a clear effect, but home attitudes appear to reinforce this effect in an important way. Among the 18 children from congruent traditional backgrounds, 7 children received the highest rating for primacy of external standards; among the 14 children from congruent modern backgrounds, no children received this rating, though some received high ratings for achievement fantasies. The mean rating of children from congruently traditional backgrounds is at one extreme, for the sample, while the mean rating of children from congruent modern backgrounds is at the other.

The major findings in this area of reaction suggest:
1) that there is a relationship between modern-traditional backgrounds and the constellation of projected concern and orientation in relation to accomplishment, with more concern and external orientation associated with more traditional backgrounds;
2) that this is more evident and clear in terms of the primacy of external standards, which more consistently appears among traditional children; 3) that the school orientation is more significantly related to the primacy of the child's concern for

external criteria but that congruent home and school attitudes in either direction appear to have a clearly reinforcing effect on the child's orientation, and 4) that boys and girls from the modern backgrounds may have a different pattern of involvement, with the boys projecting little involvement with this area in general, while the girls couple a relative lack of concern for external judgment with more fantasies of striving and achievement. These data raise the interesting question of whether the boys' pattern indicates a relative abdication while the girls' pattern suggests a relatively healthy combination.

Summary and Discussion

This section has considered the relationship between background factors in the child's life and aspects of his psychological functioning, as indicated by measures of his relationship to family and adults, his self concepts and feelings, and his cognitive performance and attitudes. The particular emphasis has been on comparing children from two groups of families with clearly contrasting qualities. Twenty-one children from clearly modern homes have been compared with 27 children from clearly traditional homes; differences in the response patterns of these children are considered to reflect the contrasting modern or traditional orientations of the families toward child rearing, though it should be noted that the modern mothers were also found to be more satisfied and involved with their children and more integrated in their mother roles, and the home experience of the two groups of children was thus different in compound ways.

In addition to testing the relationship between home background factors and child functioning, we have been interested in assessing the relative roles of home and school influence, considered in conjunction with each other, and in the effects of congruent modern, as opposed to congruent traditional, home-school backgrounds. In this section, therefore, the findings from the original study concerning the effects of modern and traditional schooling on the same aspects of child functioning have been reviewed, and a sample of children from congruent modern home-school environments has been compared with a sample from congruent traditional home-school environments.

The findings have been presented in detail in the body of this section. Though there have been methodological complications in analyzing and interpreting the data, as noted earlier, it has been possible, by examining the findings from several vantage points, to derive inferences in several areas with considerable confidence. Table 3 presents an evaluative summary of the relative influence of home, school, and home-school congruence on the children's coping patterns, as derived from the relationships established with the selected measures.

The home influence appears to be particularly salient and systematic in certain areas: in the pattern of reactions concerning family and adults, in the tendency to strong aggressive-

Table 3

HOME AND SCHOOL ANTECEDENTS: RELATIVE INFLUENCE ON CHILDREN'S COPING PATTERNS

Children's Coping Pattern Variables	Antecedent Factors		
	Home	School	Home-School Congruence
Primacy of family	+		
Projected perception of benevolent adults	+		
Self-differentiation		+	+
Awareness of impulses			
Aggressive-destructive expression	+		+
Aggression-anxiety		+	+
Orientation to childhood		+	
Social-sex role attitudes and sex typing	++	+	+
Cognitive performance (incomplete)		+	?
Imaginative expression			
Attitudes to achievement and external standards		+	+

destructive expression, and in the concepts and behavior related to social-sex roles, though the latter also shows some clear school effects. In each of these areas, the association is particularly clear and dramatic for a sex subgroup within the sample. The girls from traditional homes are notable for their shared tendency to be family oriented and to structure an adult world which is benign and nurturant; the girls from modern homes are notable for their shared tendency toward attitudes and behavior which are not clearly sex-typed; and the boys from traditional homes -- compounded perhaps by traditional schools -- are notable for their tendency toward the discharge of strongly aggressive fantasies.

The school influence appears to be strong in a number of other areas. Children with similar school experiences have shown systematic response tendencies in two areas where no apparent home relationships have been established. One of these is in the orientation toward childhood; the children from more modern schools have shown a greater tendency to value childhood and respond in childlike ways, the children from traditional schools have shown a stronger orientation toward the future and toward the power, status and privileges of adulthood. These trends were not demonstrated in relation to home orientations, and it was suggested that the school may have a particular differential impact in this area because the modern and traditional schools differ so clearly in their orientation -- the modern school valuing the child's current work, interests, thoughts and feelings as important in themselves, while the traditional school stresses training for a more responsible and important future. In the area of cognitive performance, there is also suggestive evidence that the school is the more influential factor, though the data have not been adequate for full comparison of children from different kinds of homes. It has been established, however, that the children of traditional schools tend toward more effective performance and achievement, along certain lines, than the children of the modern private school, in particular.

In several other areas, the influence of modern and traditional schools has been more convincingly established than that of modern and traditional homes, per se: the children from modern schools tend more than children from traditional schools to perceive and describe themselves in differentiated terms; the children from traditional schools tend more than children from modern schools to express anxiety in connection with aggressive feelings and discharge, and to look toward external criteria and judgment for the evaluation of their accomplishments. In each of these areas, however, the data indicate that a congruent home-school background is also an important influence on the child's reactions. The findings would suggest that the child who lives in a consistent modern or traditional environment is particularly likely to function and respond in certain ways, in terms of self-differentiation, aggression-anxiety, and the importance of external standards of evaluation. Orientation toward social-sex roles and sex-typed behavior might be added to this group, since both school influence and the enhancing effect of congruent backgrounds has been demonstrated for some aspects of the constellation, though the family orientation seems to be the most pervasive influence factor.

It is perhaps important to clarify the meaning of this assessment of home and school as relative influences on child functioning. The evaluation of relative roles is not meant to suggest that there are areas of functioning in which home or school have "no effect" on a child's way of responding. It is obvious that attitudes, values, and models in both home and school implicitly influence every child in some way in almost all his attitudes and behavior. What we have been searching for in this study, however, are those areas where patterns of response appear consistently among children subjected to similar influences, suggesting thus that the influence has a relatively predictable effect even in the face of human complexity and individual variation. It is in this sense that we emerge with an evaluation that home factors are more influential in some areas, school in others, "neither" in yet others, though the fact that both must be operative and interacting in some way in all areas is, at the same time, always true.

It is also important to clarify the idea that the trends we have noted are general and that, even in the data of this study, there are indications that the importance of particular influence factors may be more evident under some conditions than others -- more at one end of the "scale" than the other. It seems possible, for instance, that a clearly traditional home is the prime influence in fostering a strong family orientation and conventional role image in girls, almost regardless of the school they attend, while it may be the combined and reinforcing impact of a total environment -- modern home and modern school -- that most surely fosters a different orientation and role image in the girl who lives within them. Our data do suggest that in a number of areas the children from the modern homes and the most modern school react in ways that may be multi-determined by their congruent total environment, even though these are areas where one factor, such as the home, seems the more consistently influential in different settings. To explore this fully, we would need a fuller sample selected specifically to match congruent and incongruent home-school environments along the whole range of the modern-traditional continuum.

If we consider now not the relative roles of different background influences but the content of the relationships established, to what extent are these relationships in the expected direction, and what do they imply?

In general, it might be said that some of the effects that were expected did not emerge, but that those findings that did emerge were, for the most part, consistent with predictive themes.

In the area of family primacy and the projected perception of adults, the findings were essentially predictable, though complex. It had been a basic premise that the child from modern backgrounds, where he is perceived and related to in terms of individual needs, development, etc., would feel more basically supported by adults and more accepted as a total person. Though not specifically predicted, it would be consistent with this experience that the child from such an environment would feel relative freedom to expand independently beyond the family, even though feeling deep personal ties, while the child -- in particular, the girl -- from a more clearly traditional environment would feel the family ties as more restrictive and consuming. The primacy of family concerns in the inner life of the girls from traditional homes seems generally consistent with this expectation. The finding that these girls also construct a more benign adult world is more complex and, on the face of it, contrary to the prediction that children from modern backgrounds would perceive adults as more basically supportive. Perhaps the key, as has been suggested, lies in the accompanying prediction that children from modern homes would be freer to challenge and oppose adults. The measures we have used may highlight a pattern in the traditionally reared girls whereby they need to deny conflict and to fantasy an unduly benign interpersonal world, essentially wish-fulfilling in its properties. Though conflict between adults and the growing child would seem to be inevitable and not unhealthy, these children may regard conflict as unsafe, seeing love and approval as dependent on their conforming and appreciative behavior; rather than acknowledging and exploring problems, they may master threat by preserving a vision of a benign and nurturant adult world.

This little girl in the schoolroom is in many ways an adaptable pupil, conforming, cooperative, dependent on adult nurturance and probably willing to strive for it. She transfers family allegiance to the teacher, perhaps, without actually expanding her world in so doing. She can move through her school career acceptably in this way, if she is intellectually competent, but unaided she is not really apt to develop a vital and independent curiosity or a more basically confident and open relationship with adults, and it is in the facilitation of such a development that the school can be helpful.

In the area of self concepts and feelings, the direction of those findings which have been established and which involve systematic home influences was generally predicted. Out of backgrounds oriented toward the unique qualities of the individual child, toward accepting needs and fostering individual patterns of growth, we have found children with greater tendencies toward self-differentiation, less aggression and aggression-anxiety, less sex-typed reactions. Out of backgrounds stressing the unchallengeable quality of adult authority and the generalized, sometimes stereotyped, expectations of society, we have found children with a lesser tendency to differentiate the self, more evidence of aggressive pressure, higher aggression-anxiety and more set and conventional sex typing.

If we look at these findings concerning individual development from an evaluative rather than descriptive stance, there appears to be a general association between the distinctive patterns of the modern children and what we judge to be relatively healthy. Such an association is not surprising, if we consider that the modern children are products of an environment consciously geared toward principles of optimal personality development in its efforts to understand and rear its children. Within that general framework, however, there are some problems indicated, particularly for individual children. In general, it seems to be true that the traditional boys are in a more difficult psychological position in relation to the feeling and expression of anger. Though there are always interpretive problems in deciding whether highly aggressive projective data indicate a greater reservoir of anger or an easier ability to express it, the data of this study concerning aggression-anxiety, the projected perceptions of adults, and passive conforming elements in reactions to school authority,do suggest that the traditional boys are under greater pressure, are guilty about their angry feelings and need to cope with both these aspects. The modern children appear generally healthier in their patterns, feeling less pressured and angry, and less concerned about the anger they do feel. There are indications, however, that some of the boys from modern backgrounds are characterized less by this healthy pattern than by a pattern of generalized inhibition which is clearly troublesome and ineffective as a coping reaction.

Likewise, the lesser sex-typing in the modern girl seems to be part of a social phenomenon, undoubtedly more evident in modern homes, whereby women have been searching for new and freer roles; as a general trend, the expression of less sex-typed patterns in girls seems to represent a desirable and healthy development. Within this group of children, however, there are some for whom the inevitable confusion and delayed resolution in finding alternate roles are particularly salient factors. If a healthy definition of development in this area does not reside in traditional docility and limitation, it also does not lie in deep denial of basic sex identity or an indefinite inability to formulate a role. Where the pattern tends in this direction, it is clearly not adaptive.

In the area of cognitive performance, the findings of the original study, as has been noted, have not tended to support expectations in any simple or consistent fashion, and in the current investigation of home factors it has been possible to add very little, by virtue of data limitations. Two findings have emerged concerning achievement attitudes, however. One, the suggested difference in the achievement constellation of modern boys and girls, was not expected, but is provocative and bears further investigation. It raises the question of whether achievement imagery is, per se, a sign of undue pressure, from which it is well to be free, or whether it signifies a drive to master and accomplish which is essentially healthy and appropriate, as long as it is within bounds and internally determined. Perhaps the latter, more characteristic of the modern girls, is the more likely. The second finding is the clear connection between traditional backgrounds and the child's orientation toward external criteria of accomplishment and adequacy. This finding is in the expected direction and indicates a generally undesirable orientation. If we are to create the independent thinker, who moves through intellectual challenge with relative confidence and satisfaction, we need a child who is early taught that his own satisfaction and value system are important, and that the total appraisal of his efforts does not and should not reside in external judgments.

In surveying the findings from this section, it seems clear that it would be of considerable value for the teacher in the classroom to know something of the home background of the children who come to be taught, not only in broad socio-cultural terms but in terms of the qualities and values we have examined. The distinct home orientations we have focussed on appear to foster some distinct predispositions in the attitudes and reaction patterns of the children. What the teacher will do with that background knowledge depends, obviously, on her orientation toward children and toward the scope of her job. If she defines that scope broadly and is oriented toward encouraging the development of an effective and healthy individual, then she will use her skill to relieve tensions where they are apt to exist, to expand viewpoints and concerns where they are apt to be narrow and conventional, and to facilitate curiosity, self knowledge, and confidence as an independent learner, where they are apt to be already well grounded in a home background that fosters these patterns. It is likely that her efforts in such directions will be important and influential. These data have certainly suggested that the school world is also a powerful force — in itself and in conjunction with the home — in influencing the direction of child growth and development.

PART II

CHILDREN'S INVOLVEMENT IN FAMILY LIFE

CHILDREN'S INVOLVEMENT IN FAMILY LIFE

Edna Shapiro

Introduction

The period of middle childhood has often been described as a period of extension of the child's world, a shift from the known, the family-centered, to a broader world where new adults, new skills, new challenges become of paramount importance. It is a time of in-betweenness: between the known and protected yet emotionally fraught and essentially dependent pre-school years and the struggles for personal freedom and independence that characterize adolescence. The role that the family plays is of course crucial to the nature of the child's development at all stages; it is perhaps most ambiguous during the era of middle childhood. For the child, while reaching out from the family, trying to establish and maintain relationships with his peers, involved in developing his competencies in school tasks as well as in the pursuit of independent interests, is still very deeply involved with and tied to his parents, his siblings, his family group.

The role that the family does play and should play (should, from the point of view of encouraging healthy and independent growth, of enabling the development of the child's full potential) must be seen in the context of the particular stage of life with which one is dealing. The same maternal behavior that is supportive and nurturing for the four year old may be stifling to the ten year old, and is surely cause for rebellion or debilitation for the 16 year old. On the other hand, from the point of view of the child, the appropriateness and desirability of intense or exclusive involvement with his family is different at different life stages. The points of optimal balance in the parent-child relationship shift, therefore, as the child matures. To some extent one might say that the underlying orientation remains more or less the same but the content must be modulated to the child's new needs: the parents must provide the child at all ages with the support and acceptance of his dependence on them, while encouraging him to move out, to try, to take a chance, to become independent.

Furthermore, relative roles within the family shift significantly as the child grows older. A number of theorists have recently stressed the importance of the difference in identification patterns of boys and of girls. While of course both parents are of critical importance as sources of love and as models of identification, the mother is usually considered to be the primary identification figure for the very young child of both sexes. For the girl, the mother remains the most salient figure, while the boy must make a major shift --

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the father becomes the basic model for identification. Although the importance of this more discontinuous experience for boys has long been recognized, the implications, both for boys and for girls, still need to be worked out.

In recent years there has been a renascence of interest in research on parental behavior, on children's perception of parents, on the interrelationships between different modes of child rearing and the presumed consequences for children's development. Current research is characterized by the introduction of refined measures (e.g., parental power vs. nurturance; covert vs. overt modes of control), by separate consideration of mothers' and fathers' differential effects on boys and on girls, etc. This greater differentiation leads to greater clarification, but also highlights an increasing number of critical variables: the age and sex of the child; the effects of same vs. opposite sex parent; social class and religious affiliation; and of course the nature of the specific measure used. All interact to produce a complex and as yet not too clear picture of child and parental relations.

The present section turns to a specific aspect of this general field, namely, the child's expression of and involvement in family life. By culling from various measures which tap -- in different ways, at different levels -- the child's perception of family members and concern with family life, we have attempted to separate those children who seem to be centrally involved with family from those for whom this seems a less central concern. The consistency and pervasiveness of this concern (which we might consider as a basic orientation to one of the crucial life tasks of this age level), and the possible antecedents and current correlates of this concern, form the substance of the present section.

Perhaps it should be repeated here that the children in this study all come from homes which provide them with much more than minimum requirements, both affectionally and materially. They are all well cared for; they are offered a wide range of experiences; they have toys and clothes and music lessons; the parents, all middle and upper middle class, take their parental responsibilities rather seriously. Most of the children (85%) live with both parents in an urban or semi-urban setting. There are indeed many important sources of variation in the nature of family life within this group, but it is useful to remember that we are dealing here with a middle class segment of American family life. There are, for example, no neglected children, no latchkey children; nor, on the other hand, are there children brought up exclusively by mother surrogates or shunted to boarding school. It is a privileged but "ordinary" group. Differences in the children's perception of and involvement in family life, therefore, occur within this generally benign and comfortable context.

Procedures

Techniques and Measures

The children of this study were individually interviewed and tested in six sessions. In the course of these interviews and tests, the children offered a good deal of material bearing on their impressions of family life and their feelings about family members. Some of this material was induced. That is, the stimulus specifically required family-related material (e.g., a Sentence Completion Test item: "My mother always..."). Other material, by contrast, was self-generated. The stimulus, that is, did not specify, though it may have suggested, the content the child should bring to the response (e.g., an Interview question: "Who is the best person you know or can think of?"). The self-generated material, of course, allows the responding person greater scope of response. It is assumed that the content is more representative of the individual's private world, since it is brought freely to an open situation and thus appears to be prepotent in the hierarchy of his concerns.

The major measure reported in this section is a composite score derived from three independent ratings of the presence and/or intensity of family-related material. The derivation of this measure, called Primacy of Family, is described below. The remainder of this section explores the correlates of this measure, both family background correlates and other aspects of child functioning.

Some of the material that is central in this section of the report has been dealt with in Part I. There the focus was on the characteristics of the children of the 47 families selected to represent clear modern and traditional family backgrounds. In the present section, however, the focus is rather different. The entire sample of 105 children is used, and the basic questions being asked are: Do these children vary in the extent to which family concerns seem primary to them? What other aspects of family background and child functioning are related to greater or lesser involvement in family life concerns?

Primacy of family:

The measure of Primacy of Family is based on data from three projective techniques:

1) Children's Picture Story Test (CPST): A projective test modeled after the TAT but using a set of pictures geared to this age level. Each child was asked to tell a story for each of 12 pictures. Of the 12, some were more likely to suggest family-relevant themes than others, but since the child was free to populate the story in any way he wished, the stimulus only partially governed the nature and content of the response. The stimuli are briefly described as follows:

4 depict a child alone
1 depicts an adult woman alone
1 depicts an adult woman and child (boy/girl alternates)
1 depicts an adult man and child (boy/girl alternates)
1 depicts two profile faces of somewhat ambiguous age
2 depict two or more children together.

2) Play with Miniature Life Toys: The children were given an opportunity to enact stories using whatever materials they wished from a wide assortment of toys. The play materials offered multiple options, but for the present analysis, it should be noted that there was a good deal of household equipment and a number of clearly adult and clearly child figures.

3) Projective Questions: The child was asked a series of questions which required him to introspect, to think and tell about himself and his reactions to experience. The content is potentially emotional and personal:

What makes you happy, makes you feel good?
What puts you in a bad mood, makes you feel mad?
Do you daydream?
Do you have feelings you try not to show?
What kinds of things make you feel embarrassed or ashamed?

The separate ratings, which were combined to yield a composite score of Primacy of Family, are as follows:

1) CPST: the number of stories with parental figures, weighted to take into account whether the parent was a central character or merely present in the story.

2) Play: a four point rating of the tendency to re-enact family life themes.

3) Projective Questions: a three point rating of the tendency to include family material in responding to these questions.

The three sets of ratings were converted to equivalent three point scales and the scores were summed to yield a four point rating of Primacy of Family.[1] The three measures vary not only in the nature of the situations that are presented to the child, but in the nature of the scores themselves: the CPST measure deals only with the sheer number and centrality of parent figures, regardless of the role they are given; the Play measure deals with the use and centrality of family themes, again regardless of the kind of story played out; the Projective Questions measure concerns affective content about the family brought into the expression of personal feelings of anger, pleasure, etc.

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[1] The scores were converted to three point scales according to the following system:

CPST: number of stories with parental figures
1 = zero to 3 stories
2 = 4 to 6 stories
3 = 7 or more stories

Play: re-enactment of family life themes
1 = not present or clearly secondary, used only as setting; one of several stories and themes
2 = primary theme, or equivalently important theme
3 = exclusive concern of the play

Projective Questions: tendency to give family-related material
1 = no mention of family members, experiences
2 = some mention of family (2s = only siblings mentioned)
3 = considerable material about family members and experiences.

The child's score was summed. Inspection of the distribution led to some adjustments in order to take into account the fact that boys tend not to play family stories, therefore greater weight was given to, say, a boy's 2 on the play rating than to a girl's. Play and CPST were given slightly more weight than the Projective Questions measure. The resultant composite score is, therefore, not simply a weighted sum of the three contributory scores. Most of the adjustment occurred in the distribution of scores for the boys.

Since these three scores all bear on the same issue -- the tendency for the child's thematic material to reflect feelings and content about his family -- they are naturally interrelated. But since they also have been selected from three separate sources which represent distinctly different types or modes of expression, the correlations among them are not high.[1] CPST and Projective Questions are primarily verbal, but the Play situation provides for manipulative and non-verbal means of expression. CPST and Play require the imaginative development and reconstruction of the stimulus, while the Projective Questions ask the child to think and talk about himself in a way that demands less transmutation of experience but does require some awareness of his own feelings and reactions.

From the low level of the intercorrelations, one might conclude that the different requirements of the three techniques operated more strongly than the similarities. The rationale for pooling these separate and apparently somewhat independent measures into a composite score depends on the assumption that the three situations offer three distinctive opportunities which children utilize in different ways, but that all are viable approaches to a meaningful conceptual entity: the child's perception of and involvement with family life, which together can be thought of as family primacy.

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[1] The intercorrelations of component measures of the Family Primacy rating are as follows:
CPST and Play: boys, r=.15; girls, r=.22; total, r=.19.
CPST and Proj. Quest.: boys, r=.24; girls, r=-.09; total, r=.11.
Play and Proj. Quest.: boys, r=.05; girls, r=.14; total, r=.19.

Before assessing the psychologically meaningful relationships of any untried dimension, it is often useful to make sure that the dimension is not simply a function of some less important and essentially irrelevant phenomenon or aspect of behavior. Thus, it seemed prudent to check the Family Primacy scores against other measures which, if related, would complicate the interpretation of the findings.

Chronological age was one of these factors, Though the age range of the children in this study was narrow, it seemed worth checking whether or not the younger children among them were more family centered, more drawn to the family drama, while the older were less involved. But the correlations are definitely not significant (boys' r = -.17; girls' r = -.16; total sample r = -.14).

It was also considered possible that Family Primacy scores might be related to the composition of the family; that family life might be more primary for only children than for children who have several siblings. Or, that first born children might feel more connection with, more involvement in, family life. This, however, is not the case. There is no relationship between ordinal position in the family and the Family Primacy scores. (Of 37 only children, 21 have low and 16 have high

Family Primacy Scores; of 58 children who are either first born or only children, 27 have low and 31 have high Family Primacy scores.)

Finally, it seemed important to see whether those children whose family lives were complicated by divorce, death, or separation of the parents were more (or less) likely to be drawn to family life themes. Sixteen of the 105 children, ten girls and six boys, come from such so-called "broken homes," although in four of these instances the mother had remarried. Inspection of their scores on Family Primacy indicates that the issue of divorce or separation of the parents does not per se lead to greater or lesser emphasis on family themes. The means for this rather special group are comparable to the means for the group in general (boys, N = 6, M = 2.17; girls, N = 10, M = 2.60; total, N = 16, M = 2.44. See Table 1 for group means).

Thus, it is clear that chronological age, ordinal position in the family, and the fact of "broken" homes have no relationship to the child's apparent involvement in family concerns, as measured by the Family Primacy score.

Findings

Sex Differences

One of the most important findings to emerge from this measure is the clear difference between boys and girls in the tendency to give family material. As can be seen in Table 1,

Table 1

PRIMACY OF FAMILY:
DISTRIBUTION OF SCORES ON FOUR POINT SCALE AND MEANS FOR BOYS, GIRLS AND TOTAL SAMPLE

		Primacy of Family				
Ss	**N**	**Low 1**	**Medium Low 2**	**Medium High 3**	**High 4**	**Mean**
Boys	57	24	19	5	9	1.98
Girls	48	6	12	15	15	2.81
Total	105	30	31	20	24	2.36

Analysis of Variance
Girls vs. Boys: F=20.86; $p= < .01$

girls are much more prone to give such material and to receive high scores on this measure.

This is certainly not a surprising difference. Rather it is consistent both with a layman's conception of the differences between boys and girls and with the roster of differences that has emerged in this and other studies. Discussion of the possible implications will be postponed until inspection of the various other measures with which this variable is related. But the simple fact that boys tend to score low and girls to score high permeates all the material and naturally affects the ways in which this measure is related to other measures.

Relations with Home Variables

The possible relationship between the child's score on Family Primacy and the nature of the family experiences he has had was one of the first questions we considered. Our measures of the child's home life come from an independent source -- the mother's responses to a questionnaire and personal interview, which yielded information about family background, attitudes and ideology, and relevant aspects of the mother-child relationship. Seven of the measures derived from these techniques were considered, on an a priori basis, to be most pertinent to the Family Primacy dimension of the children's functioning:

1. Modern Traditional Orientation (MTO) of the mother, a composite rating which includes #2, #6 and #7 below, as well as an additional rating of ideology based on the interview data and a rating of the mother's

encouragement of the child's individual expression and interests. (See Part I and Appendix III).

2. Modern Traditional Ideology of the mother, as indicated by her score on the parent attitude questionnaire.

3. Socio-Economic-Cultural Level of the family, based on the education, income and occupational status of the family.

4. Mother's Satisfaction with Child[1]

5. Mother's Involvement with Child

6. Enactment of Authority Role

7. Emphasis on Standards of Behavior and Achievement

Correlations between Family Primacy scores and these seven home background measures are shown in Table 2. The correlations tend to be of a low order. Seven of the correlations, however, occurring with five of the seven variables, are statistically reliable. For three of the variables (MTO, Modern Traditional Ideology and Socio-Economic Level), the relationship seems to be carried most strongly for the families of girls, while in one case (Emphasis on Standards of Behavior and Achievement), the relationship holds only for families of boys.

On the basis of the most inclusive rating (MTO), it appears that there is a tendency for children, especially girls, whose family's orientation is more traditional to show more investment in family life or, conversely, for those whose family's orientation is more modern to show less investment. This relationship

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[1] Dimensions 4 through 7 are ratings of the mother-child relationship, based on interview data. See Part I of this report.

Table 2

FAMILY PRIMACY: CORRELATIONS WITH SELECTED INDICES OF HOME BACKGROUND AND MOTHER-CHILD RELATIONSHIP

	Modern Traditional Orientation[1]	Mod.-Trad. Ideology (Questionnaire)	Socio-Economic-Cultural Level of Family	Ratings Based on Interview with Mother			
				Mother's Satisfaction with Child	Mother's Involvement with Child	Enactment of Authority Role	Emphasis on Standards of Behavior and Achievement
	(trad.→mod.)	(trad.→mod.)	(middle→ upper middle)	(less→more)	(less→more)	(rational→ arbitrary)	(less→more)
Boys (N=57)	-.16	-.17	-.004	-.20	-.16	+.18	+.24*
Girls (N=48)	-.30**[2]	-.34**	-.29**	-.23	-.19	+.13	+.14
Total (N=105)	-.18*	-.22**	-.15	-.22**	-.15	+.10	+.11

1. The Modern Traditional Orientation is a composite rating which subsumes 3 of the measures presented here (M-T Ideology, as indicated by questionnaire, Enactment of Authority Role, and Emphasis on Standards of Behavior and Achievement), as well as an additional measure of ideology based on interview data, and a rating of mother's Encouragement of Individual Interests.

2. ***correlation significant at $p = <.01$
**correlation significant at $p = <.02$
*correlation significant at $p = <.05$

is supported by the correlation between Family Primacy and the mother's response to the questionnaire -- a more specific, more surface measure of modern-traditional ideology. It will also be remembered that in comparing the children whose families were selected for their clear modern and traditional orientations (see Part I), a similar pattern of correlations was found: the girls of these homes showed more concern with their families than the boys, and children, especially girls, from the clear traditional homes showed more concern than children from modern homes.

In regard to socio-economic-cultural level, there is a suggestion that, for this generally upper middle class sample, girls from families of somewhat lower socio-economic status tend to be more family oriented.

The last four dimensions show two significant correlations with Family Primacy. Mother's Satisfaction with the Child bears a suggestive negative relationship to Family Primacy, bordering on significance for boys and for girls and low but reliable for the sample as a whole.[1] It is interesting that the only reliable relationship for boys is that between mothers' Emphasis on

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[1] The rating of mother's Satisfaction with Child is not a component of the estimate of Modern Traditional Orientation, but in the sub-sample of clear modern and traditional mothers, the clear moderns expressed greater satisfaction than the clear traditionals ($t = 3.18$, $p = < .01$).

Standards of Behavior and Achievement and boys' scores on Family Primacy. Here, the mother variable is perhaps more pertinent for boys. There is some evidence that mothers of boys set somewhat more stringent standards of behavior and achievement for boys than for girls (for total sample, Analysis of Variance: $F = 3.80$; $p = <.10$).[1] Of course, we are dealing here with a resultant of the level and kind of standards that are set and the nature of the child's reaction to those requirements; it may be that boys tend to react more strongly to standards and limits that are not so different from those set for girls.

Two of the last four dimensions show no relationship with Family Primacy: the mother's Involvement with the Child, which might be considered a kind of mirror image of child involvement with the family but apparently is not perceived as such by the child, and Enactment of the Authority Role. The lack of relationship with the latter dimension is somewhat surprising, both because the authority rating is a component of the estimate of the modern traditional orientation of the home, and because of the close conceptual connection between ways of carrying the authority role and the emphasis on standards of behavior and achievement.

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[1] This trend is supported in the sub-sample of clear modern mothers ($t = 2.73$; $p = <.05$) but is not supported in the sub-sample of clear traditional mothers, where the mean for mothers of boys is equivalent to that for mothers of girls.

The low level of the correlations between home background measures and the children's Family Primacy scores leaves a great deal of room for the operation of other pertinent variables. Still, although they are not compelling correlations, they do form a pattern and do all tend in the same direction. The children who show the most involvement with family matters tend to be those from families where the general ideological orientation and the modes of relationship are more traditional, presumably more rule-bound and adult-centered; where there is more emphasis on standards of behavior and achievement; and where the mother expresses less satisfaction with the kind of child she has. It seems fair to assume that such a home constellation presents the child with some sense of pressure and dissatisfaction. The pattern of relationships in the data would suggest that the greater expression of concern with family themes, in fantasy and personal-emotional material, may be one of the child's ways of dealing with this pressure and dissatisfaction and the conflict it arouses. On the basis of this score alone, however, we could draw this conclusion only as conjecture; the measure of Family Primacy does not take into account the content of the child's concern, but pools the projection and expression of pleasurable experiences with those of anger and frustration. It may be this pooling of qualitatively different content, in fact, that partly explains the low order of the correlations.

Relations with Modern-Traditional School Orientation

Assuming the complexity of untangling the relative contribution of home and school as determinants of any particular aspect of child life, one might still expect that the child's involvement in family would be influenced more by the nature of his home life than by his school life experiences. However, we have examined the data for the possible contribution of contrasting school orientations,[1] partly because in other areas of the larger study we have found it useful to examine the impact of school differences and partly because Family Primacy might represent a combination of family experiences with other significant aspects of the child's life.

Table 3 shows the mean scores for boys and girls from each of the four schools and presents the results of an Analysis of Variance. It can be seen that there is essentially no difference among the three public school groups. Children from Conrad, the modern private school, stand out as different from the others: their mean scores are reliably lower than those of each of the three public schools.

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[1] See the Introduction of this report for a description of the modern and traditional schools.

Table 3

FAMILY PRIMACY: COMPARISON OF MEAN SCORES OF BOYS AND GIRLS IN THE FOUR SCHOOLS

Subjects		Means					Statistical Comparisons				
							Analysis of Variance and t-tests			Sexes: Within Schools	Sexes: Between Schools
Ss	N	Browning Trad. Public School	Adams Trad. Public School	Dickens Mod. Public School	Conrad Mod. Private School	Total All Schools	School	Sex	Sex X School		
Boys	57	2.00	2.39	1.75	1.71	1.98	F=2.89*[1]	Girls>Boys F=20.86***	F=2.41 NS	B: g>b, t=3.33**	Boys: A>C,t=1.89⌿
Girls	48	3.50	2.69	3.17	2.17	2.81	B>C:t=2.75***			D: g>b, t=4.18***	Girls:B>C,t=3.33*** D>C,t=2.78** B>A,t=1.88⌿
Total	105	2.67	2.53	2.46	2.36	2.36	A>C:t=2.33* D>C:t=2.43*				

1. *** = significant at p = <.01
   ** = significant at p = <.02
   * = significant at p = <.05
   ⌿ = significant at p = <.10

As noted above, the girls show considerably more family involvement than do the boys. When we look at the boys and girls separately, we see that among the boys there is some tendency for those at Adams to be relatively high on this measure; their mean score is actually higher than the mean of the Conrad girls. Among the girls there is a clear trend: both Browning and Dickens girls are certainly the most family oriented, reliably more so than Conrad girls. Considering the public school groups alone, Browning girls are clearly the most concerned with family, and Adams girls are the least so.

In general, the Conrad children, both the girls and the boys, appear the least concerned with family, and the Browning and Dickens children, especially the girls, appear the most concerned. It seems likely that a number of factors, including the home orientations of these children, are operating conjointly to produce these effects.

Relations with Other Measures Yielding Family Content

This section explores the correlations between the Family Primacy score and measures derived from other techniques which yielded family content. In exploring these other techniques and measures, the basic purpose has been to determine the extent to which high involvement with family themes and figures is a pervasive orientation, a consistent and prepotent response to a wide variety of stimuli, and the extent to which children with such high involvement are characterized by particular modes of dealing with family content.

Sentence Completion Test -- Parent Stems. Two of the stems of a Sentence Completion Test administered to the children bear directly on the children's feelings about family members, e.g., "My mother always..."; "Lots of times my father..." The children's completions of these stems were categorized in terms of whether or not the response was directly related to the child; that is, whether the child's response expressed a relationship between parent and child, on the one hand, or, on the other, referred to the parent as a separate, independent person. For instance -- My mother always: cooks supper for us; helps me; makes me practice; vs. My mother always: shops; goes to the office; wears a hat except when she sleeps. Or -- Lots of times my father: works on my toys that are broken; drives us to different places; plays with me; vs. Lots of times my father: is very busy; goes to work; reads the newspaper.

In general, 66% (69 of 104) of the children, both boys and girls, see the mother in some relationship to themselves -- giving, withholding, guiding, punishing, feeding, scolding, but in interaction. Fewer see the father in such relationship terms, (43%, 45 of 104). While an equal number of boys respond to the father item in relationship and non-relationship terms, only a third of the girls give responses that indicate a relatedness between father and daughter.

When the children's responses to these two Sentence Completion stems are compared with the ratings of Family Primacy, it appears that those rated as showing more involvement in family are most likely to express a relationship between parent and child in their completions of these stems (see Table 4). This can be seen for the total sample and for the boys, when the distribution is split to isolate those children rated as showing least family involvement. There are, however, only a few girls (6) who fall into this category of the Family Primacy Score, and a meaningful comparison thus cannot be made for girls.

There is, then, a general indication that those children who respond to the Sentence Completion parent items in relationship terms -- regardless of the affective tone of the relationship expressed -- are more likely to be those who bring family content into other spheres of response.

Family Drawings. During one of the sessions the children were asked to "draw a family." These drawings were rated along several dimensions, of which three seem of special interest in relation to the Family Primacy score. These dimensions are: 1) the child's tendency to portray a family which exactly duplicates his own family; 2) the child's tendency to include in the drawing a figure similar to himself; and 3) the child's tendency to portray a family whose members are inter-connected in some way. In considering these measures, we were interested

Table 4

FAMILY PRIMACY: RELATIONSHIP WITH TENDENCY FOR SENTENCE COMPLETIONS TO INDICATE PARENT-CHILD RELATIONSHIPS

Sentence Completion Responses	Family Primacy Low (1)	Family Primacy Medium→High (2,3,4)	Total	X^2	p level
All S's (N=100)					
Relationship to one or both parents	13	49	62	5.11	<.02
No relationship indicated	16	22	38		
Boys only (N=55)					
Relationship to one or both parents	11	26	37	5.36	<.02
No relationship indicated	12	6	18		

in determining whether the children whom we have rated as most involved in family would have the most tendency to reproduce their own family, to include an obvious self-figure in the family picture, and to depict an inter-connected group of family members. While there was some rationale for expecting such tendencies, it also seemed possible, and worth investigating, that an inverse trend would appear, or that the two sets of responses would not be related in a systematic way.

1. Portrayal of own family. In general, the children tend to make family drawings which are not simple duplications of their own families. Of the 98 drawings which could be judged, 75 showed some alteration: 43 children made extensive modifications (adding or omitting a parent or several siblings), and 32 made less extensive modifications but still drew altered versions of their families (changing the age relations among siblings, adding or omitting a sibling).

There is no relation between the tendency to modify the family in the family drawing and the child's Family Primacy score. It is interesting to note, however, that boys tend more to replicate the true family in their family drawings: of the 23 children whose family drawings depict facsimiles of the actual family members, 17 are boys, only six are girls. Or, to put it another way, while 17 of 52 boys (33%) draw replications of their true families, only six of 46 girls (13%) do so.

2. Inclusion of self-figure. The drawings were coded for the presence of a child figure the same sex and approximately the same age as the child -- in other words, for the presence of a figure one might take to represent the self. Approximately two-thirds of the children (63 of 99) do put a self-similar figure in their family drawings, either indicated pictorially or specifically labelled as such. This group trend applies both to those considered low and those considered high on the Family Primacy measure, indicating no relationship between them. There is also no difference on this measure between boys and girls.

Among those who do not indicate a self-similar figure, however, two-thirds are considered low in Family Primacy (24 low, 12 high). This trend is carried by the boys, not by the girls: of 18 boys who do not put themselves in the picture, 16 are low and 2 high, while the 18 girls who do not put themselves in are rather evenly split, 8 low and 10 high.

3. Inter-connectedness of family members. The drawings were also rated in terms of whether or not the family members were inter-connected in some way that suggested that the family was a unit, more than an aggregate of individuals. Most of the children (72 of 99) do not depict any inter-connectedness among family members. Figures tend to be portrayed as spatially separated, not connected with each other either in literal or symbolic ways. This general trend applies both to those considered low and those considered high on the measure of Family

Primacy. There is, however, a very tentative suggestion that the 27 children who do show some connectedness among family members are somewhat more likely to be rated as low in Family Primacy (17 low, 10 high). This would be a somewhat surprising trend, if valid, but it is not strong enough in these data to warrant an elaborate explanation.

In general, there are no clear relationships between the Family Primacy score and these measures on the family drawings. What emerges from the drawing data is a set of group trends, so strong that there is little variability in the sample and not much evidence that involvement in family life, in general, mediates the way in which family drawings are handled. The group trends are in themselves of interest, however. Most of these nine year old children do in fact treat the drawing as a projective technique, three-fourths of them using the opportunity to modify the reality of their own family situation, though most of them also include a figure much like themselves in that modified rendition of the family. It is as if they are free from an undue literalness, able to explore and modify this very important family group in fantasy, while still staying within it. The fact that three-fourths of them do not depict any interconnectedness among family members may have either an important psychological significance, related to their growing independence, or -- just as likely -- may have to do with the exigencies of this rather complicated drawing task itself. There is little relevant published data with which to compare this tendency to draw family members as separate and unrelated entities; it is interesting to note the fact, however, that on a more verbal and less complex task, such as the Sentence Completion Test, these same children tend to complete sentences about their parents in terms that do stress the relatedness of parent and child.

It might be noted that among those relatively few children who deviate from the group trends there are some very tentative findings: girls seem to respond more to the projective nature of the drawing situation, since very few of the girls (only 13%) replicate their true families in their drawings; and those children who are low on the Family Primacy score have some tendency to show family members in connection with each other and to draw families without a figure similar to themselves.

Family Responses on Interview and Sociometrics. Both the Interview and the Sociometric Technique included an item which called out family-oriented responses, though the items did not directly suggest such a response and the children's reactions were thus self-generated.

In the course of the Interviews, the children were asked "Who is the best person that you know or can think of?" More than half of the children (59) said "My mother," "My father," or both. Boys and girls are rather evenly split in their tendency to select a family member as "best person" (30 of 57 boys and 29 of 48 girls). There is no evidence of relationship between the measure of Family Primacy and this tendency to choose mother or father as the "best person" the child knows.

It seemed reasonable to expect that those children whom we have selected as showing the greatest involvement with their families might be those who respond to this question with a family member. This is not the case, however, and it seems evident that the two measures are tapping different aspects of the child's feelings about his family. It may be, also, that the children who respond to this question with family figures are a mixed group, composed of those for whom this is a sign of a rather amorphous and immature involvement with all-powerful family figures, as well as those for whom this represents a more mature and age-appropriate identification with a differentiated and valued parental figure.

On the Sociometric Technique administered to the children, they were asked, among other things, "Who is the person you tell your troubles to?" Of the 69 children who were asked this question (the technique having been administered only to a portion of the study children), 55 (80%) mentioned a parent, either alone or in combination with a friend or sibling. This is an over-riding trend which bears no relationship to the Family Primacy score, and which seems to be characteristic both for boys and for girls.

The children's responses to this question, like their responses to the "best person" question, suggest, more than anything else, that family ties are still strong and solid at this age, for the majority of the children.

Relations with Other Aspects of Children's Responses

This section is concerned with the relationship between Family Primacy scores and measures of children's responses which bear a more distant connection to the core of interest in the family. These latter measures are as follows: Achievement Fantasies; Primacy of External Standards; Projected Benevolence of Adult Attitudes; Older Social-Sex Role Fantasies; Imagination; Choice of Best Age to Be; and Adult Reactivity.[1]

Most of the measures dealt with previously have had an immediately obvious conceptual connection with the child's involvement in his family life. We tended to expect some consistency in patterns of response. Now we are turning to a series of measures where, in a sense, the probability of finding relationships might be considered to be lower. We should perhaps be surprised that here we do indeed find reliable relationships.

Correlations between Primacy of Family and the measures noted above are shown in Table 5.

It can readily be seen that most of these correlations are

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[1] These measures have all been described in the second half of Part I of this report.

Table 5

FAMILY PRIMACY: CORRELATIONS WITH OTHER MEASURES OF CHILDREN'S RESPONSES

Technique	Measure	Boys	Girls	Total[1]
CPST	Achievement Fantasies	.19	.33***[2]	.30***
CPST	Primacy of External Standards	.05	.43***	.21**
CPST	Benevolence of Adult Attitudes	.10	.31**	.33***
CPST	Older Social-Sex Role Fantasies	.10	.26*	.27***
CPST	Imagination	.23*	.45***	.42***
Play	Imagination	.03	.14	-.03
Interview	Choice of Best Age to Be	-.12	.27	.16
Million $	Adult Reactivity	.36***	.14	.28***

1. The Ns vary slightly from technique to technique:
   for CPST analysis: boys=56, girls=47, total=103
   for Play analysis: boys=56, girls=48, total=104
   for Best Age Question: boys=33, girls=28, total=61
   for Million Dollar Question: boys=56, girls=47, total=103

2. *** = correlation significant at $p = <.01$
   ** = correlation significant at $p = <.02$
   * = correlation significant at $p = <.05$

statistically reliable, although they are of relatively low magnitude. Since we know that the tendency to deal with family life material is more characteristic of girls than of boys, it is not surprising to see that most of these correlations indicate a positive association for the group of girls; and when the total group correlation is stable, it seems to be carried mostly by the girls.

It should be remarked that a number of these measures are derived from analysis of CPST stories, as is one of the components of the Family Primacy score. Furthermore, there is a positive, albeit low, relationship between Family Primacy scores and a composite measure of the children's productivity,[1] raising the question of whether the willingness or ability to give more material may not make it more likely that there will be material of whatever kind one is looking for. It should be emphasized, however, that we are engaged here in a search for *specific* kinds of material, and there is no reason to expect that productivity and fluency per se assures content about the family.

While these measures are probably not completely independent of each other, they do indicate a set of interrelated concerns which form a coherent and psychologically meaningful constellation of themes. Girls who are high on Family Primacy tend also to show more achievement imagery; to place their standards of success outside of themselves in the judgment of external figures and the external signs of competence and worth; to project adults who are supportive and benevolent rather than controlling and unavailable; to develop themes which point toward adolescence and adulthood, which deal with love, marriage and being grown-up, and which are appropriate to an older social-sex role. Furthermore, their CPST stories are considered more imaginative -- they tend to transcend the stimulus pictures, to introduce figures, to develop more elaborate themes.[1]

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[1] The productivity composite includes: length of Rorschach protocol, length of self-descriptive letter, number of responses in Uncommon Uses Test, and length of CPST stories. Correlations with Family Primacy are as follows: boys' $r=.10$, girls' $r=.29$, total $r=.30$. The relationship for girls is reliable at $p=<.05$, that for the total sample at $p=<.01$.

There is no relationship, however, for girls, between the Family Primacy score and either the tendency to choose older or younger ages, when asked what the "best age" would be, or the childlike or adult quality of their response when offered the hypothetical chance to "spend a million dollars."

For the boys, however, there is a significant relationship between Family Primacy scores and the way in which their fictive million dollars is spent. The responses to the Million Dollar question were categorized in terms of whether the nature of the spending was predominantly for objects of child life or for more adult purposes (e.g., toys, animals, food vs. furniture, investments, etc.). Those boys who tend to be more family-centered tend also to spend their imaginary money for more adult purposes. It is interesting, though frankly not clear, why this particular relationship holds for boys and not for girls.

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[1] That these children, especially girls, do not also develop more imaginative play themes is perhaps an artifact of the measure: many of the family life stories enacted in play were based on rather bland, ordinary scenes of daily life and were judged as less imaginative than, say, stories of drama and adventure that led the child beyond the boundaries of everyday real life.

Relations with Measures of Functioning in the School World

The world of the nine year old is largely composed of home, school and peer-group. These are the three major spheres of influence and sources of attraction as well as trouble and challenge for the child of this age. Are there any clear relationships between feelings about the family and attitudes about school?

A composite rating of Attitude toward School was made.[1] The categories are as follows: negative feeling about school; ambivalent feeling; passive-conforming attitude; positive identification with school. As can be seen in Table 6, there is no relation between the children's expressed attitude toward school and the score of Family Primacy. One might have expected a reciprocal relationship, assuming that those children with

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[1] The sources of this measure were as follows: interview material about what the child considered the desirable and undesirable aspects of school life, about his concept of an ideal school, etc.; six Sentence-Completion stems about school and school personnel; school material in children's letters describing themselves and their lives; CPST stories.

Table 6

FAMILY PRIMACY: CORRELATIONS WITH ASPECTS OF FUNCTIONING IN SCHOOL

Measure	Boys		Girls		Total	
	N	r.	N	r.	N	r.
Attitude toward school (composite rating)	57	.09	48	.001	105	.01
Achievement in school	40	-.05	36	.05	76	-.02

lesser investment in and concern with family life would be more likely to have shifted the focus of their involvement to school life. Or, one might have expected, for girls in particular, that those most involved with home life matters would also be those most concerned with school, most likely to be the conforming, compliant and/or the positively identified. Neither of these expectations is confirmed by the data, however; the correlations are virtually zero.

Another way of looking at involvement in school life is given by the assessment of the children's level of school achievement. For the 76 children attending the three public schools, an estimate of level of achievement in school work was made, based on the teacher's reports and on school grades (see Part III). Again the correlations presented in Table 6 show that there is no relationship between Family Primacy and the child's achievement in school.

There is also no reliable relationship between Family Primacy scores and an estimate of popularity with the school peer group.[1] It should be noted, however, that this measure does not go directly at the question one wants to ask: are the children who are high in involvement in the family less invested in peers (or, conversely). We do not have any clear or simply derived measure, however, that estimates the child's investment in his peers. The "popularity" measure deals, rather, with other children's responses to the subject. Thus, the lack of relationship obtained here still leaves open the question of the child's own involvement in and concern with peer life.

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[1] The measure of popularity with peers is derived from a set of sociometric choices made by the children; "popularity" is a composite of the number of times the child was chosen by his peers and the number of children choosing him.

Summary and Discussion

One of the primary conclusions that emerges from this concentration on children's concern with family, is the simple fact that at this age most children still easily express their close ties to immediate members of the family. Both boys and girls are most likely to choose a parent as an ideal figure, as the person to whom they tell their troubles. When we look at the stories children tell to the CPST pictures and that they enact in play, we find that family life themes are the most prevalent (although here there is considerable difference between girls and boys). In one sense this is certainly not surprising: these children are, after all, only nine years old; their basic point of reference is the family group; this is the world they know best, the people they know best and on whose love and support they naturally lean.

It is within this context, taking for granted the generally high level of involvement and concern with the fabric of home life, that one must view the differences with which this report has been dealing. Often in theoretical discussion of the shaping forces and developmental tasks of middle childhood, so much stress is placed on the extension of the child's horizons, on the development of new competence, on the mastery of skills, the importance of peer group life, that there is a consequent minimization of the continuing salience of family life. The assumption that the first and perhaps most important acts of the family drama are over by six, that basic life patterns are set, that the period from seven to the re-awakened turbulence of adolescence is characterized by the redirection of life energy, the practice and development of skills and talents, the consolidation of gains -- suggests an almost either-or conception which does not do justice to the complexity of the interplay of forces that govern development (at this or any age).

It seems clear from the foregoing analysis that children of this age do vary considerably in the extent to which their fantasy and expression are family-centered. For some this is a minor concern: these are the children whose stories and responses to a wide range of tasks will include little material that relates to their lives at home, to their parents or siblings, to the nature of their everyday family experiences. For others it seems a primary life orientation: almost any topic will lead them to family content; family related material is distinctly prepotent; family experience is, perhaps, a touchstone for other life experiences.

The bulk of this section has been an attempt to discover the antecedents and correlates of this variation in orientation to the family. While some of the findings are clear, others remain at the speculative level and can only indicate directions for further research.

The tendency for children to be more or less involved with the family shows some correlation with particular aspects of the mother-child relationship (as we have measured them), though the pattern of correlations is not entirely consistent and the magnitude of the relationships is low. Two of the findings point to a common inference. First, the extent of the mother's satisfaction with the child bears a negative relationship to the child's involvement with the family. Second, the boys who are more involved with family come from homes where greater stress is placed on standards of behavior and achievement. As noted earlier, these relationships suggest that the greater expression of concern with family, in fantasy and personal-emotional material, may be more of a compensatory dealing with an area of life that is somewhat conflicted, that offers difficulty and some dissatisfaction, rather than a dwelling on and elaboration of sources of pleasure and comfort.

The data indicate that the children, especially the girls, who come from the more traditional homes are more likely to be centrally involved with family than are the children from the more modern homes. And it also appears that, within this generally upper middle class group, those children who come from homes of somewhat lower socio-economic-cultural status tend to be more involved with family. These findings, taken together, may reflect the influence of different kinds of experiences; they may also reflect a difference in value patterns that may be related to the modern-traditional dimension.

While the underlying theory of both the modern and the traditional modes of child rearing lay great stress on the home and consider family life as of singular importance for the child, there is a sense in which family per se is valued in traditional family ideology that seems qualitatively different from the way it is viewed in the modern ideology (see Levinson and Huffman, 1955). Perhaps this rather elusive difference might be characterized by saying that the modern ideology stresses the consequences of particular aspects of the parent-child relationship, the nature of experiences offered, the formative importance of specifiable modes of relationship, while the (classic) traditional ideology stresses the importance of family per se, not regardless of particularities, but with less emphasis on them -- family because it is family.

We might, therefore, speculate that the traditionally reared children -- especially the girls -- learn to stress and value family life in and for itself. They may see themselves, now and in the future, as more integrally involved with the content and values of family life. Their present and their future roles are defined within the family.

One of the clearest threads that goes through the data at all levels is the sex-linked nature of the Family Primacy variable. Girls are distinctly more likely than boys to express their involvement in and concern with family life matters. And this is especially clear for girls from traditional homes. Relations between the potency of family material and other variables, both antecedent family variables and other aspects of the child's behavior, show up more clearly for girls than for boys.

Schaefer and Bayley (1963), in an extensive study of the correlations between maternal and child behavior variables at different age levels, found that maternal behavior and sons' behavior tend to be highly correlated at nine to twelve years. In fact, they find that "Maternal behavior has shown significant correlations only with current behavior of daughters, but with prior, current, and subsequent behavior of sons" (p. 95). Of course we are dealing in this study with concurrent measures only, but we do find, in this area especially, that maternal variables tend to be more highly correlated for girls than for boys. Schaefer and Bayley suggest that their data may be taken to indicate that "girls' adjustment reflects more their current interpersonal situation while the adjustment of boys reflect more stable structures which have developed through their entire history of interpersonal relationships" (p. 95).

But we are dealing here with a particular area of life experience and it does seem that family matters more for girls. The Family Primacy measure certainly seems to be more a meaningful dimension for girls than for boys, and since there is a greater range of responsiveness, correlations with other dimensions are more likely to come through.

Consider the girls who seem centrally focused on home and family. We have seen that they tend also to show more imagery about achievement; that they tend to place their standards of success outside of themselves, in external signs of competence, in the approval of adults; that they tend also to picture adults as relatively supportive and benevolent rather than controlling and disapproving; that they tend to develop themes which point toward the future, toward adolescence and adulthood. One might say that their stories, their play, their concerns can, in a sense, be viewed as a preparation, conscious or unconscious, for the adult roles they will in fact most likely fill. And it seems that much of the content of their imaginative world deals with adults; adults are the arbiters of experience.

On the other hand, looking back in time, one can see some of these concerns as more developed, more informed but essentially unchanged versions of the play and games of these girls as four year olds. Instead of literally stepping into their mothers' high heels and parading around the house, they now can construct and populate a reasonable facsimile of a household, with more sophistication and detail. They are knowledgeable about family roles and routines, about more facets of the adult world. But their concern may indeed be seen as an expansion of an already known realm of experience rather than as an extension into new and untried territory. These girls may be considered to exemplify the social-psychological continuity of female life experience that recent theorists have been emphasizing.

When we want to compare these girls with the less family-oriented girls, or with the boys who also show more concern with family, there are certain limitations to the data that hamper the comparisons. Although there need be no assumption that a fixed amount of energy is directed either to family concerns or to other concerns, the processes of measurement do, to some extent at least, lead to such inferences. In the playing out of stories, for example, when they are not about family-related matters, they tend usually, for the boys, to be stories of adventure, of chase, of wars, of aggression. For the girls they may also be stories of adventure, or of child life, or of animals. They may be magical and fantastic. They may be well or poorly developed, but they encompass a broad possible range of themes. One cannot point to a single, simple alternate which has the compelling force of the family drama. On the other hand, that may well be the major point.

All children at this age are still deeply emotionally involved in the details, the intimacies and intricacies of family life. Their roots are still in the home, their central ties still to their parents. Their parents remain their most important sources of support, of approval and disapproval, of value. But children do vary in the extent to which they are able to move out, to broaden the scope of their experiences. The options are multiple: the peer group; new non-familial adults; the pursuit of specialized interests; the world of sports; of fantasy; of books.

The relation between extent of expression of family concern, as we have measured it, and the intrapsychic state of the child's involvement with family does not lend itself to a unitary theoretical formulation. The unevenness of findings in our study of the expression of family primacy may be due, in fact, to the intrinsic complexity of the psychological processes involved. The child who seems to be expressing minimal concern with family matters, for whom the family drama seems to have little force, may be seen as having come closer to resolving his inevitable conflicts in this area; the crises of belonging to and separating from the family may have been satisfactorily dealt with. Yet we have also to consider the possibility that for at least some of these children this lack of expressed involvement may represent not a greater degree of conflict resolution but rather an inability to deal with an area of conflict and difficulty, the suppression of a problem rather than an active attempt to cope.

On the other hand, the child who populates his fantasies with family figures, for whom family life concerns seem to serve as an organizing concept for much of his or her expression, may be indicating a perseverative dependence on the family, an excessive dwelling on the safety of the known and the comfortable, or may be indicating that he is in the active process of attempting to work through problems in an area of life that are appropriately a source of conflict and difficulty at this stage of development.

From the study of the correlates of Family Primacy, however, it does seem possible to conjecture that at least some of the children, especially the girls, who are most oriented to family life are embarked on a line of development which possesses, concomitant with its greater continuity and consistency, an essentially simple pattern. A unified theme runs through to a preordained goal. While among the other children there may be those who are following a more disjunctive route, perhaps more subject to disruption and confusion, but by its nature more complex, potentially richer because more is encompassed and more lines of experience are opened and made personally meaningful.

PART III

ACHIEVEMENT IN SCHOOL

ACHIEVEMENT IN SCHOOL

Patricia Minuchin and Tillie Moldowski

Introduction

It is in the middle years of childhood that the challenge to become a productive and participating member of society is first presented to the child by his world. Now he is clearly mobile and articulate, able to function out of his family circle, and capable of sustained effort and concentration. Hopefully he is himself eager to increase his skills and expand his understanding and mastery of the world about him. At this point he is presented by his society with an opportunity and a demand: he is sent to school and expected to apply himself persistently, industriously and successfully to the job of learning.

The children in our study had been in school for four years. Like any other group of children, some of them had been relatively successful, others less so, though it should be noted, in the context of national concern over children who learn very little in school, that these children from privileged and well educated families were all working in school at grade level and there were probably no potential "drop outs" among them. There were, nonetheless, relatively successful and unsuccessful children. In view of the crucial importance of successful mastery in the school situation -- its implications for the child's own sense of adequacy and competence, its influence on the shape of his future, its impact on other people -- it seemed of considerable importance to explore the characteristics of children who differed in their mastery of the school's learning challenge, especially since the fairly sizeable body of research in this area is still characterized by gaps and contradictions in knowledge. It was decided, therefore, to isolate the "high" and "low" achievers of our sample for special study, directing our inquiry to a series of general questions: Does the difference in the intellectual competence of the high and low achieving children extend over a variety of cognitive situations? Are there other attitudes, reaction patterns, status implications that are correlated with relative academic success and failure? What are the antecedent conditions that make for differences in successful performance?

When we pose our questions in terms of generally "successful" mastery in school there is, of course, an immediate dilemma. The schools included in our study were specifically selected because they differed in their concepts of education, and one of the components of this variation, certainly, was the difference in modern and traditional attitudes toward mastery and the evaluation of learning and achievement. Would it be meaningful, then, to draw a sample of successful and unsuccessful achievers from these different schools?

In considering this problem, it was decided to select the children in terms of the standards their own schools applied to them, asking in effect whether they were successful in coping with the challenge of their own academic environment as they experienced it. Given this basic decision, it then seemed to us that it would be a valid and rather interesting procedure to pool the children designated as high achievers by the various schools and compare them with those designated as low achievers, looking for general patterns of reaction that might distinguish these two groups despite the fact that children within each were responding to varied situations.

Procedure

In attempting to select the sample of high and low achievers, it was immediately apparent that there were limits to our pooling possibilities: there was no way of selecting high and low achievers from Conrad School, the modern private school. As a matter of policy, this school did not mark the children nor enter any comparative grades in their school records. Further, the teacher in this school, when interviewed about the children as part of the research procedure, tended to discuss them in such a detailed and differentiated way that only a few of the study children were dealt with in the available time. These facts were interesting illustrations of the school's orientation toward the evaluation of children and their progress; they suggested also that the experience of the Conrad children with academic evaluation was so notably different that it was conceptually inadvisable, as well as technically difficult, to draw a sample from this school and pool them with the others. We drew our sample, therefore, from among the 76 children attending the three public schools of the study. Though two of these schools were considered relatively traditional and one relatively modern, they were all part of one public school system and the grading procedures were generally comparable, though underlying attitudes in using them were somewhat different.

Selection of the high and low achieving samples was based on the children's grades, as recorded through their fourth year on the record cards, and on the fourth grade teacher's evaluation of achievement, as expressed in an interview. Three judges rated each child on the basis of these data and a final rating was arrived at by consensus. In each case, the judges used the particular school sample as the reference group.

Selection in the different schools posed unique problems and tended to reflect something of the orientation of the school. All schools used the notation system of "S" for satisfactory schievement, "U", "NS" or similar symbols for unsatisfactory achievement, and "S^{O}" for outstanding achievement. Browning, however, the most traditional school, tended to use the range of the scale most fully, and the children were easily grouped both on the basis of recorded grades and the teacher's manner of evaluating the children globally in clear and comparative groupings. In Adams, the other traditional school, it was difficult to pick high achievers, though these children as a group were highly intelligent and effective, because "S^o" grades were apparently reserved for very exceptional achievement. In Dickens, the modern public school, "S^o" grades were given more liberally, and "low" achievement had to be defined, finally, by straight ratings of "S" for a child, with no "S^o" grades in a major subject.

The relative meaning of low achievement in this sample is clear from the fact that "unsatisfactory" grades were rare in all three schools. However, there were children whose achievement was high or low relative to the others, and their own experience of adequacy, of course, was in relation to this immediate classroom reference group.

In studying the achievement correlates of children from these three schools it would have been desirable to compare the patterns of high achieving children from modern and traditional schools with each other, as well as pooling them for purposes of comparison with the low achievers. As Table 1 indicates, however, the number of children from any one school is small and such comparisons are not warranted, especially since the subgroupings by the child's sex are extremely important. Further, the modern-traditional groups are unbalanced; Adams and Browning are both traditional schools, but the modern viewpoint is represented only by Dickens. The imbalance is more striking for boys than girls, however, with disproportionately more boys attending the

Table 1

DISTRIBUTION OF HIGH AND LOW ACHIEVERS BY SCHOOL AND SEX

School	High Achievers			Low Achievers		
	Boys	Girls	Total	Boys	Girls	Total
Adams (Traditional Public School)	4	2	6	6	1	7
Browning (Traditional Public School)	4	2	6	2	4	6
Dickens (Modern Public School)	3	3	6	4	4	8
All Schools	11	7	18	12	9	21

traditional schools. In general, then, school comparisons are not indicated, though occasional impressions in relation to the school groups will be noted.

In the following section, the high and low achieving children will be compared on a series of measures derived from the techniques administered to the study children as part of the research procedure.[1] The findings will be presented under the following headings:

1. Cognitive Functioning in Goal-Directed Situations: Formal Achievement and Intellectual Competence.
2. Cognitive Functioning in Unstructured Situations: Imagination, Personalized Reactivity, Differentiation in Self-Description.
3. Attitudes and Feelings About Achievement and School.
4. Status in the Classroom Peer Group.
5. Family Background Factors.

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[1] See general introduction of this report.

Findings

Cognitive Functioning in Goal-Directed Situations: Formal Achievement and Intellectual Competence

The high and low achievers were first compared on their cognitive performance in structured, goal-directed situations -- those situations which tested their concrete mastery of subject matter, their IQ, and their problem-solving ability. Differences are reported below.

Achievement Test Scores

It seemed particularly important to compare the two groups of children on a standardized test of achievement. Since these children were selected from three different public schools, and since these schools had somewhat differing philosophies and attitudes toward children and achievement, there was some question about pooling the three sets of high and low achievers. A standardized achievement test was seen partly as a way of assessing the criterion of selection. Do the pooled groups of high and low achieving children, selected in different schools on the basis of grades and teachers' evaluations, form coherent units? Do they actually perform distinctively on a standardized test of achievement, indicating a consistent difference that transcends particular situations and sets them apart, in the school world, as relatively "high" and "low" achievers?

Results from the Stanford Achievement Test (SAT) indicate that these two groups are clearly separable. Table 2 presents means for high, low and middle[1] achievers on each of the five subtests administered, and on a composite T score calculated for the total achievement battery. It will be seen that the high achiever group is consistently highest on all subtests and on the composite score, while the low achiever group is consistently lowest; this distinction applies to comparisons of boys, girls and total groups. The middle group means lie between the high and low groups in all cases, though they are closer to the means of the high achievers.

The Stanford Achievement Test was administered to all subjects at the end of the 4th grade. The scores reported in Table 2,when converted to grade equivalents, indicate that the children of this sample are achieving at least at their own grade level, even in the group we have designated low achievers. This finding serves to emphasize the point discussed above in connection with the selection of the two groups: "low" achievers in this sample are children whose school achievement is relatively low, in comparison with their own peer group; though they thus experience a kind of failure, they are not failures in terms of national norms or grade level requirements.

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[1] "Middle" achievers, included in the table for purposes of comparison, are 37 children from the three public schools who were tested in the larger study but not selected as either high or low achievers.

Table 2

STANFORD ACHIEVEMENT TEST PERFORMANCE OF HIGH, MIDDLE AND LOW ACHIEVERS: MEAN GRADE SCORES

S.A.T. Subtests		High Achievers	Middle Achievers	Low Achievers
Paragraph Meaning	Boys	78.3	74.7	57.1
	Girls	73.6	65.2	50.6
	Total	76.4	69.6	54.5
Word Meaning	Boys	71.9	71.7	60.4
	Girls	76.0	69.5	52.8
	Total	73.5	70.6	57.3
Science	Boys	67.6	67.2	55.3
	Girls	62.0	59.5	49.3
	Total	65.4	63.1	52.9
Social Studies	Boys	69.3	69.2	53.7
	Girls	72.2	58.4	49.8
	Total	70.5	63.4	52.2
Arithmetic Reasoning	Boys	60.2	56.5	48.6
	Girls	61.8	57.0	48.8
	Total	60.8	56.8	48.6
S.A.T. Composite: T Score	Boys	58.3	56.2	47.5
	Girls	57.1	53.6	45.0
	Total	57.8	54.9	46.4

S.A.T. Composite T Score: High vs Low Achievers

$t=4.45$; $p=<.01$

In comparing grade equivalents for the high and low groups on individual subtests, the difference between them is again quite clear. The high group is achieving on the 7th and 8th grade levels on Paragraph Meaning, Word Meaning and Social Studies, and on the 6th grade level on Science and Arithmetic Reasoning; the low group is achieving on the 5th grade level on all tests except Word Meaning, where they are functioning on the 6th grade level.

The two groups also show some differences in the patterning of performance by the two sexes. Within the low achiever group, there is a consistent trend for boys to score 6-7 points higher on all subtests except Arithmetic Reasoning (see Table 2). Within the high achiever group, the sexes are more evenly matched: boys score higher on Paragraph Meaning and Science, girls higher on Word Meaning, Social Studies and, to some extent, Arithmetic Reasoning.

In general, the achievement scores from the SAT clearly distinguish between the high and low achievers. The differences described by teachers and reflected in school grades are corroborated by formal achievement testing.

IQ Scores

IQ's for the children are available from two tests: the Kuhlmann-Anderson Intelligence Test (KA) -- a group administered paper and pencil test -- and the Performance Scale of the WISC. On the KA, scores are available for almost the complete sample

of high and low achievers (35 of 39), but the WISC was administered only to those children studied during the second year and are available, therefore, for only 22 of the high and low achievers.

Table 3 presents the mean IQ's for the high and low achieving groups.

From the table, several facts are clear.

First, all groups are above average -- generally well above average -- in intelligence.

Second, there is a clear difference between the high and low achievers on the Kuhlmann-Anderson, a difference that appears consistently for the boys, the girls, and the total group. The high achievers, with means in the superior range on this test, score significantly higher than the low achievers.

Third, the clear IQ difference between high and low achievers on the KA is not borne out by the WISC scores, which do not show significant differences.[1] Though the sample here is more limited and generalizations must be made with some caution, the IQ scores on this test suggest that the distinction between the high and low achieving groups on intellectual performance and ability may not be as global as the KA scores would suggest, and may have a more complex pattern.

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[1] Because of the small N's, the groups were compared through a Chi Square analysis assessing the instance of average and superior IQ's in each.

Table 3

INTELLIGENCE TEST PERFORMANCE OF HIGH AND LOW ACHIEVERS: MEAN IQ SCORES ON KUHLMANN-ANDERSON TEST, AND WISC PERFORMANCE SCALE

Intelligence Tests	High Achievers						Low Achievers					
	Boys		Girls		Total		Boys		Girls		Total	
	N	Mean IQ	N	Mean IQ	N	Mean IQ	N	Mean IQ	N	Mean IQ	N	Mean IQ
Kuhlmann-Anderson Test	10	133	7	129	17	131	9	113	9	111	18	112
WISC Performance Scale	5	116	4	114	9	115	6	124	7	104	13	113

Kuhlmann-Anderson: High vs Low Achievers - $t = 6.7$; $p = < .01$

WISC Performance Scale: High vs Low Achievers - $X^2 = .13$; NS

WISC Performance Scale: Low Achieving Boys vs Low Achieving Girls - $X^2 = 3.41$; $p = < .10$

Inspection of the table indicates that the equivalent means for the total groups on the WISC reflect quite different boy-girl patterns. The boys and girls of the high achieving group are essentially equivalent, as they are on the KA. In the low achieving group, however, the boys have the highest average IQ of all groups, while the girls have the lowest.[1] For the boys, at least, there is a suggestion of high intellectual potential and performance, when it is individually tested, when it is not so dependent as in the KA on writing and test-taking skills, and when it is defined and measured through relatively non-verbal materials.

Inspection of individual WISC and KA scores in both groups suggests an interesting relationship between the two IQ tests and the low or high achievement status in school. Within the high achieving group, 4 children, whose school achievement was superior, showed average WISC Performance IQ's, but superior KA scores. Within the low achieving group, 5 children, whose school achievement was relatively low, showed superior WISC Performance IQ's but lower KA scores. In both groups, in other words, the KA scores are more consistent with the school achievement of the children.

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1. A Chi Square analysis of WISC Performance IQ's for low achieving boys and girls was not significant, probably because of the low N (13), but was suggestive. (See Table 3)

In the pattern of IQ findings, there is suggested support both for a relatively differentiated approach to IQ testing -- one that is geared to understanding cognitive strengths and deficits in various spheres -- and for a relatively differentiated approach to the materials and processes of teaching and learning in the classroom. It seems possible that the Kuhlmann-Anderson is a reliable predictor of academic success in this sample because it sets the child the task of performing rapidly and confidently under his own impetus with essentially verbal-conceptual material, and in so doing it is highlighting skills that are the touchstone of success in the public school academic setting. While these are valuable skills and important for maximum progress in learning, the findings from the WISC Performance IQ suggest that children with considerable intelligence in other, less completely verbal, areas may be comparatively unrecognized in these school settings and may not be offered material for learning that is optimal for their skills. If pathways for mastery and achievement in school are limited to the essentially verbal, these children may perform and rate as relatively low achievers, despite their capacity to think and perform extremely well through other media.

Problem Solving Performance

Four problem solving techniques were administered to the children studied during the second year of the research. They can be briefly described as follows:

Cylinder Problem: This technique, adapted from the work of Saugstad (1952) presents essentially a non-verbal problem: the child must remove a cylinder from a tubular container. He is not allowed to turn the container over, and he cannot physically grasp the cylinder and pull it out; he must therefore find other means. The child is first asked to suggest possible solutions, then is offered a variety of tools and objects (screwdriver, rope, thimble, pencil, etc.) which he may use to help him solve the problem. A pitcher of water unobtrusively placed on the table offers what is considered the best possible solution, but other ideas are also acceptable and workable.

Meaning Context: In this technique, adapted from the work of Werner and Kaplan (1952), the child must solve the riddle of a nonsense word embedded in a series of 5 different sentences. The context provided by each sentence serves as a clue for the nonsense word, and the sentences provide increasingly clear clues as the series progresses. The child is asked to guess the meaning of the word for each sentence in the series, and he may check back to the preceding sentences as he goes along. There are four nonsense words (i.e., four series) in the test.

Spies Problem: This problem, developed by Edna Shapiro of our research staff, poses a deductive puzzle. The child must find a principle of similarity in a set of complex stimuli which vary and are alike in a number of discriminable ways. The test is to identify three "spies" from a group of 12 dolls, and to identify them the child must find some way in which they are like each other but different from all the other dolls. The child may ask the Interviewer an unlimited number of questions, to which he can receive either a Yes or No answer, but he is essentially on his own for developing his strategy and processing his information.

The principle of solution follows that of the Vigotsky Concept Formation Test.

Uncommon Uses: This variation on a technique developed by Guilford (1956) is a completely verbal-conceptual problem. The Interviewer mentions an object which has a common function (newspaper, tire, etc.), asks the child to give the common function and then to think of "some other things you might use it for." There are nine such objects.

The task is completely self-propelled, offering no clues or guides as to satisfactory progress or solution.

Each of the four problems was scored on the following two variables, though the relevant criteria were different for each problem:

1) Effectiveness of cognitive approach: a rating based on the process of cognition -- the extent of relationship thinking, of dealing with implications, connections, conditions, etc., in the course of attempting to handle the problem.

2) Accuracy of solution: a score based on the extent of success in solving the problem.

Composite ratings of these two variables were based on performance on all four techniques.

Table 4 presents the means for the high and low achieving groups for each of the problem solving techniques and for the composite ratings. The N here, as in the WISC, is 22, since this problem solving battery was also administered only to the children studied during the second year of the research.

It should be noted, first of all, that the performance of the high achievers, as a group, is significantly superior to that of the low achievers. Composite ratings, both of the effectiveness of cognitive approach and the accuracy of solutions, indicate that the high achieving group is significantly more effective. Inspection of the table indicates that this superior performance is consistent for both ratings on each of the four techniques, as well as for the composites. As a generalization, it seems clear that the children who are designated as high achievers can bring their skills to bear on a variety of problem solving situations. Their performance is consistently more effective, as a group, than the performance of the low achievers -- not only

Table 4

PROBLEM SOLVING PERFORMANCE OF HIGH AND LOW ACHIEVERS: MEAN RATINGS OF EFFECTIVENESS OF COGNITIVE APPROACH AND ACCURACY OF SOLUTION ON FOUR PROBLEM SOLVING TASKS

Problem Solving Tasks	High Achievers			Low Achievers		
	Boys (N-5)	Girls (N-4)	Total (N-9)	Boys (N-6)	Girls (N-7)	Total (N-13)
Cylinder Problem:						
Effectiveness of cognitive approach	3.80[1]	4.25	4.00	3.67	2.83	3.25
Accuracy of solution	2.20[1]	2.50	2.33	2.33	1.83	2.08
Meaning Context:						
Effectiveness of cognitive approach	3.00	3.25	3.11	3.17	2.43	2.77
Accuracy of solution	17.80	17.75	17.78	17.00	14.57	15.69
Spies:						
Effectiveness of cognitive approach	3.40	2.75	3.11	2.67	2.43	2.54
Accuracy of solution	1.80	1.50	1.67	1.17	1.29	1.23
Uncommon Uses:						
Effectiveness of cognitive approach	3.60	3.75	3.67	2.67	2.43	2.54
Accuracy of solution	36.40	38.50	37.33	32.83	31.43	32.08
Composite Ratings Based on Four Tasks:						
Effectiveness of cognitive approach	2.60	2.25	2.44	1.50	1.43	1.46
Accuracy of solutions (composite Z score)	53.80	53.50	53.70	49.50	46.71	48.00

[1] Scores and rating scales vary for the different tasks

Effectiveness of cognitive approach (composite rating): High vs Low Achievers - $t = 11.09$; $p = < .001$.

Accuracy of solutions (composite rating): High vs Low Achievers - X^2 (medians)= 4.23; $p = < .02$

in the classroom but in a variety of situations which test their ability to cope with cognitive problems.

Further inspection of the table, however, suggests that the generalization bears modification, partly in terms of the two sexes and partly in terms of the different test techniques. It is clear that the boy-girl differences in the low achieving group are again important. The low achieving girls are, with the exception of only one rating, always in the lowest position. The low achieving boys, however, vary in their performance; while they are quite low on some techniques, they do well on others.

The technique pattern for the low achieving boys indicates that they are quite effective on the Cylinder and Meaning Context problems, comparing favorably with the high achieving children and clearly superior to the low achieving girls. On the other two techniques, the Spies and Uncommon Uses, their performance is inferior to the high achieving group and similar to that of the low achieving girls.

In this pattern, there are elements of striking similarity to the pattern of the low achieving children on the KA and WISC IQ tests. Here again, the low achieving girls seem generally less capable in their performance than the high achieving children. The boys, however, seem to have a discernible profile of strengths and weaknesses. That they show strength on the Cylinder problem, the most non verbal of the tasks, seems highly consistent with their strength on the WISC performance scale. Effective performance in both these situations, it might be noted, depends not only on simple manipulative skill; it involves capacities for organization, association of ideas, conceptualization, etc., but in contexts which are relatively non verbal and which offer tangible, concrete material to be dealt with. In the case of the Meaning Context problem, the material is verbal-conceptual and the sucess of the low achieving boys is not simply explained. Perhaps it is important, however, that on this task the child has clues from the external environment for periodically checking back over his ideas. It is on the Spies and Uncommon Uses that the child must be most dependent on inner conceptual resources for his entire strategy, for his definition of progress toward solution, and for his impetus to continue searching, and these are the techniques which most clearly distinguish the high and low achievers of both sexes.

In general, then, the high achieving group appears to be significantly better equipped than the low achieving group to deal consistently well with a variety of cognitive problems and materials. Within the low achieving group, however, as has been noted above, there are children with discernible skills for highly effective intellectual performance, though they may require periodic feedback from the environment and/or material which is not exclusively verbal-abstract in order to function at this level.

Cognitive Functioning in Unstructured Situations: Imagination, Personalized Reactivity, Differentiation in Self-Description

Intellectual functioning is generally thought of in connection with the mastery of ideas or facts and the solution of definable problems. In the previous section, material on the intellectual functioning of the children has been reported in these terms -- in terms of their ability to solve problems, produce ideas relevant to specified challenge, and demonstrate the achievement of mastery over the materials of their academic curriculum. Cognition, however, is capable of broader definition. Much activity to which we give other names, such as "imagination," is also, of course, a kind of cognition, though one would not describe the intellectual activity as directed toward a particular goal or problem, except in the broadest sense.

In the following section, measures will be reported which reflect thinking in situations which are relatively unstructured and which do not generally require specific task completion or problem solution. Though quite different from each other in many respects, the measures have been accumulated in this section because they share a general quality: they are estimates of the child's tendency to think and react freely from within himself when the challenge is open ended and invites personal participation, rather than problem oriented and impersonal. They are measures of imagination, personalization and differentiation, and they are derived from test situations in which it is the child, as much as the task, who defines what is an appropriate response.

The measures, and the techniques from which they are derived, will be briefly defined below and compared for the high and low achieving children.

Imagination

Imagination ratings were derived from the following techniques:

> Children's Picture Story Test (CPST): A story telling test similar to the TAT, but consisting of 12 pictures selected for relevance to this age level.
>
> Play Session: A session in which the child selected from a wide variety of miniature toys (people, animals, vehicles, furniture, etc.) to play out and verbalize dramatic stories.
>
> Aesthetic Preferences: A technique in which the child was shown postcard reproductions of predominantly contemporary painting and sculpture (abstracts, human figures, still life, etc.) unidentified by name or artist and generally unfamiliar to him. He was asked to sort them in terms of preference, discuss his reasons, and make up a title for each of the pictures.
>
> Similes: A technique adapted from the work of Sanford (1943) which presented the child with the beginning of a simile (as hot as ..., as pretty as...) and asked him to complete the phrase. There were 19 items.

Each of these techniques was rated separately on the quality of imagination. Though cues were specific to the technique, general principles of rating were similar, stressing the degree to which the child transcended descriptive levels and went beyond specific given elements of the stimulus to invest his responses with reactions and elements that were clearly part of his own invention. Thus, his stories were rated on the basis of elaboration -- creation of characters not depicted; development of feelings, thoughts, motives; inclusion of imagined events, meaningful details, etc., as well as the use of language, humor, literary devices. Play was rated for originality of story and the vividness with which the plot was acted out. Similes and Aesthetic Preferences stressed the transcendance of the stimulus, range and differentiation of responses, evidence of "spark" and humor. Aesthetic Preferences was rated twice -- once for general imaginative qualities, and once for the extent to which the titles made up by the child reflected elaborative and interpretive reactions rather than formal description.

Table 5 presents the mean ratings on imagination for the high and low achieving groups on each of these techniques.

It is evident from the table that there are no consistent group trends. In contrast with the scores on intellectual competence reported in the previous section, the mean scores of the high and low achieving groups on imagination are not very different in magnitude and do not, on the several techniques, show a consistent direction of difference. This is, in itself, an important fact, given the general consistency with which they perform differently on problem oriented cognitive tasks.

Further inspection of the table indicates that the pattern of sex differences is again important. In the total sample of 105 children from which this sample was drawn, there were clear

Table 5

IMAGINATIVE, PERSONALIZED AND DIFFERENTIATED COGNITIVE FUNCTIONING OF HIGH AND LOW ACHIEVERS: MEAN RATINGS ON PROJECTIVE AND SEMI-PROJECTIVE TECHNIQUES

Projective Variables	High Achievers			Low Achievers		
	Boys (N-11)	Girls (N-7)	Total (N-18)	Boys (N-12)	Girls (N-9)	Total (N-21)
Imagination:						
CPST	2.27	3.86	2.89	2.75	3.44	3.05
Play	3.00	3.71	3.28	3.08	3.33	3.19
Similes	2.45	2.86	2.61	2.50	2.44	2.48
Aesthetic Preferences:						
General rating	2.55	3.00	2.72	2.75	3.33	3.00
Title rating	2.30	2.71	2.47	2.64	2.11	2.40
Personalized Reactivity:						
Dictated Letter	2.45	3.14	2.72	2.55	2.67	2.60
Differentiation in Self-Description:						
Dictated Letter:						
Range	1.55	2.14	1.78	1.27	1.44	1.35
Quality	1.45	1.71	1.56	1.27	1.56	1.40
Stick Figure Scale	2.27	2.86	2.50	1.91	2.22	2.05

All Measures: High vs Low Achievers - t=NS

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sex differences, with the girls generally more imaginative in their reactions to the various techniques. This difference is generally evident for this sample as well.

Considering the high and low achieving boys and girls separately, several points seem noteworthy:

The high achieving boys, in contrast to their strong position on tests of IQ, achievement, and problem solving, tend to drop notably in the quality of their performance on tests that call for imaginative handling. They are the lowest group on almost all of the measures. On these techniques, where effectiveness is dependent on a willingness and ability to let go and give of oneself and one's inner ideas, these boys appear relatively inhibited, despite their evident intellectual and verbal talent. The high achieving girls, on the other hand, maintain their position. They produce, almost without exception, the most imaginative protocols on all the techniques. They seem able to react not only with goal-directed intellectual competence, but with relativelyfree and imaginative cognition in these less structured and directed situations.

It might be noted that the low achieving girls seem, in these more open situations, to perform more adequately than in the problem solving and achievement situations. Clearly the least effective group in those situations, they are here able to perform at least as well as the boys of both groups.

Personalized Reactivity

From a technique called the Dictated Letter, a rating was made of the child's tendency to invest his protocol with personalized reactions.

The technique itself is describable as follows:

> Dictated Letter: A technique in which the child is asked to imagine that he has a pen pal in a foreign country to whom he is writing for the first time. He is asked to dictate a letter about himself and his life.

The rating is on a continuum from a relatively stereotyped approach or content to a relatively personalized approach or content. Stereotyped letters were defined as predominantly factual and descriptive of life routines, while more personalized letters were defined as communicating affect, interests, personal perceptions and meanings.

Table 5 presents the mean ratings on personalized reactivity for the high and low achieving groups.

The pattern of means is similar to the general pattern on the imagination ratings. The high achieving girls tend by far to react with the most personalized material, investing their letters with less stereotyped and more internally determined content. The high achieving boys, with the lowest mean, are certainly more impersonal and defensive, and are not more effective on this task, in the sense of freedom from stereotypy, than the low achieving children.

Differentiation in Self-Description

A third set of measures seems relevant to the kind of intellectual functioning under discussion. On two techniques, the children were asked to think about and describe themselves. Their responses were then rated for the extent to which their thinking and communication about themselves was differentiated rather than gross, vague or restricted. We are considering here, then, the quality of thinking about the self -- an area of thought where differentiation requires an ability to deal with personal material. In the sense that these measures assess a kind of intellectual expression where thought and inner feelings are fused and communicated, they are similar to the measures of imagination and personalized reactivity reported above.

The techniques involved are the Dictated Letter, described above, and the Stick Figure Scale, describable as follows:

> The Stick Figure Scale: A technique in which the child is presented on each item with 2 stick figures, drawn at opposite sides of the page, which represent contrasting qualities along some dimension of self description ("gets very excited and enthusiastic about things he likes" vs. "pretty calm and quiet most of the time," etc.). The child is asked which one is more like himself and is then requested to draw himself in. There are 10 items.

Differentiation was measured in the following ways:

On the Dictated Letter, differentiation ratings were based on the range and quality of the content about the self -- range, in terms of the number of categories into which the material could be coded (basic descriptive facts, activities and functions, preferences and feelings, memories, plans, etc.), quality in terms of the tendency to go beyond basic descriptions of facts and activities.

On the Stick Figure Scale, the differentiation rating was based on the tendency to make gradations of judgment along the continuum defined by the two figures. The most differentiated thinking was defined as that in which the child used the gradations with variety and flexibility, as he moved from item to item.

Table 5 presents the mean ratings on differentiation in self description for the high and low achieving groups.

In general, the high achieving group shows somewhat more of this differentiated thinking than the low achieving group. It is notable, however, that it is the high achieving *girls* who stand consistently above the other groups. The high achieving boys are not particularly effective in terms of this kind of differentiated thinking about themselves; they are on a general par with the low achieving girls, while the low achieving boys tend to rate last.

There is, then,a general theme that runs through the findings reported in this section. When we define intellectual functioning in terms of thought that must draw freely on inner ideas and personal material, the distinction between the high and low achieving groups followsa pattern which is rather consistent and which differs from the pattern of intellectual functioning in the face of problem oriented, relatively impersonal material

The girls of the high achieving group show a level of performance which is consistently more effective than that of the other groups. Both in the more problem oriented situations and in those situations which call for personal material, the expression of imaginative fantasy, etc., they are able to function very well. The high achieving boys, however, show a rather surprising discrepancy. In these latter situations, they tend to produce constricted thinking -- at times the most constricted of all, and almost never appreciably more free and effective than the children of the low achieving group.

The low achieving girls are perhaps also worthy of note. With a consistently poor pattern on the tasks reported in the previous section and with some suggestion, even, of a less gifted intellectual endowment than the other children, they appear able to express their thoughts, in these situations, with a degree of imagination, differentiation and personalized investment that compares favorably with both high and low achieving boys.

The pattern of findings concerning intellectual performance in these children is a complex one. The strength of the high achieving children, as defined in the classroom and as evident in a variety of cognitive situations, does not appear to extend inevitably to all situations -- even those which can still be called cognitive. By the same token, the less effective performance of low achieving children is not necessarily pervasive. In both these groups, the pattern is different, though in distinct ways, for the two sexes. It seems more than likely that both "high" and "low" achievers are evaluated in unduly unitary terms, in the average classroom, particularly since academic activities tend often to call upon an important but limited set of skills. These data suggest that a broader definition of cognition and a more differentiated approach to intellectual assessment might lead both to enhanced understanding of the child's intellectual strength and mastery and to greater possibilities for fostering his learning in school.

Attitudes and Feelings about Achievement and School

The material in this section deals with the children's opinions and attitudes toward themselves, as learners and achievers, and toward aspects of the school as a milieu for their learning. The first part -- attitudes and feelings about achievement -- considers the nature and reality of their self appraisal in the area of academic achievement, as well as evidence through projective material of their concern with achievement and with external evaluation. The second part -- attitudes and feelings about school -- considers the extent of positive identification with school and the quality of reaction to school authority, as well as the content of attitudes and opinions concerning important elements of school life, the qualities of a desirable teacher, and relative preferences and dislike of academic subjects.

In this survey of attitudes, the emphasis is on comparison of high and low achieving groups: Do high achieving children appraise themselves more favorably or more realistically, in terms of academic competence? Are they more or less concerned with achievement and external judgment in their fantasies? Are they more or less positively identified with school? Do they react to school authority in different terms? Do they stress different aspects of school, prefer different academic subjects or value different qualities in a teacher than the low achievers do?

Attitudes and Feelings about Achievement

a) Self-Appraisal

The children's appraisal of their own school performance was obtained from the Stick Figure Scale, a technique described in a previous section. On the relevant item, one figure was described as a child "who thinks he's pretty good at his work in school" while the other was described as a child "who thinks he's not so good at his work in school." The child was then asked "Which one is more like you?" Responses were coded on a 3 point scale, allowing a middle score for middle choices.

Table 6 presents the mean ratings on self appraisal for the high and low achieving groups.

The differences between the high and low achieving groups are not statistically significant, though the high achieving boys and girls do rate themselves, on the average, as more successful in their school work than the low achieving boys and girls. The fact that the low achieving girls rate themselves lowest is in

Table 6

SELF APPRAISAL OF HIGH AND LOW ACHIEVERS CONCERNING SCHOOL PERFORMANCE: MEAN SCORES ON STICK FIGURE SCALE ITEM[1]

Variables	High Achievers			Low Achievers		
	Boys (N-11)	Girls (N-7)	Total (N-18)	Boys (N-12)	Girls (N-9)	Total (N-21)
Positive Self Appraisal	2.6	2.3	2.5	2.1	1.8	2.0
Stick Figure Scale						

1. Higher scores indicate more positive self appraisal

High vs Low Achievers: t = 1.67 NS

Table 7

REALISM IN ACADEMIC SELF APPRAISAL OF HIGH AND LOW ACHIEVERS: NUMBER OF CHILDREN WHOSE SELF APPRAISAL IS CONSISTENT OR NOT CONSISTENT WITH SCHOOL PERFORMANCE

	High Achievers			Low Achievers		
	Boys	Girls	Total	Boys	Girls	Total
Consistent With School Performance	8	3	11	4	4	8
Not Consistent With School Performance	3	4	7	7	5	12

High vs Low Achievers: X^2 = .95NS

keeping with their actual performance on the tasks of achievement and problem solving reported above which are, in turn, most reflective of school-related performance and skill.

The means reported in Table 6 suggest a generally realistic hierarchy in the self-appraisal of the groups. It is possible, however, to examine the relationship between a child's self appraisal and his realistic school performance in greater detail by comparing his Stick Figure Scale appraisal of himself with his actual rating from teachers' evaluations and grades.

Table 7 presents the number of high and low achieving boys and girls whose self ratings are consistent or not consistent with their school performance.

There is some slight tendency for the high achieving children to be more realistic in their appraisal than the low achieving children, but this difference is not statistically significant. To the extent that it suggests a direction of difference it would be, of course, quite understandable: it is by and large easier to face and admit competence in oneself than failure.

There is also a suggested interaction between the realistic "admission" of success or failure and the sex of the child,though again the statistical difference is not reliable. Seventy-two per cent of the high achieving boys evaluate their competence realistically while only 44% of the high achieving girls do so. On the other hand, 44% of the low achieving girls, but only 27% of the low achieving boys, appraise themselves realistically. In analysis of the larger sample of 105 children, a general sex difference was found in self appraisal on this item, with the boys evaluating themselves more positively than the girls ($p = < .05$), though there is no evidence for the total sample that the boys are actually better students than the girls. This sex difference in verbalized self appraisal is apparently operating in the present sample as well. The high achieving girls, though perhaps the most pervasively competent group, do not make positive assertions commensurate with their ability, while the low achieving girls make relatively realistic self appraisals in the face of a presumably more difficult objective reality. For the boys, this syndrome is reversed. High achieving boys, in presenting themselves to the world on a positive, self assertive level, make a realistic appraisal of their position in the classroom. Low achieving boys, however, in presenting the same assertive picture, tend to overestimate their actual academic success.

The question, then, of whether high achievers appraise themselves more favorably or realistically than low achievers is not simply answered. While there is some slight tendency in this direction, the sex of the child is also an important factor; boys, generally more favorable in self-appraisal, may be more "realistic" under conditions of objective success, with girls more "realistic" under conditions of relative failure.

One more fact might be noted from the data about self appraisal in academic areas. In the most traditional school, Browning, the original selection of high and low achievers was a simple process: the teacher made clear gradations and the record of school grades confirmed her clear divisions. In this school, 81% of the children included in this sample were able to rate their school performance realistically. In the other two schools, only 38% and 35% of the children assessed themselves in complete accord with the teachers' grades. It seems clear that Browning is a school where very clear guidelines are given to the children concerning the relative status of their academic performance, and they reflect this in their self evaluations. As a finding, it gives rise to some question. Is it a desirable thing to have children so clearly aware of their relative standing, as determined by grades and global evaluation, that their self appraisal mirrors the official ratings? Is there any danger that the child's capacity to evaluate his strengths and weaknesses differentially will be crippled thereby? What, indeed, are the advantages and disadvantages of an academic atmosphere in which teacher and children do think in terms of clear and global divisions? The questions are not easily answered, but the percentages reported above suggest that, for better or worse, the academic atmosphere with the clearest and most competitive evaluation tends to communicate a realistic sense of relative standing to the child and that this, in turn, becomes part of his self image.

b) Projected Achievement Concern

Two measures applied to the Children's Picture Story Test assessed aspects of the children's projected concern with achievement.

Prevalence of achievement fantasies

Protocols were rated on a 5 point scale for the prevalence of achievement fantasies and imagery. The rating scheme was based on the McClelland-Atkinson definition (McClelland, Atkinson, et al., 1953), which stresses themes and imagery concerning "competition with a standard of excellence," but was an adaptation rather than a duplication of their rating process.

Table 8 presents the means of the high and low achieving children on projected achievement fantasies.

As the table indicates, the differences between groups are slight. Girls' means are somewhat higher than boys, and perhaps it is of some importance that the mean of the low achieving girls -- whose demonstrated achievement is lowest -- tends to be the highest on this measure of expressed achievement fantasies.

Primacy of external standards

Protocols were rated on the extent to which fantasies stressed external and tangible criteria for the evaluation of learning adequacy and academic accomplishment (adult judges, tests, formal marking systems, indicating whether a figure had done well or not). Rating was on a 3 point scale.

Table 8

PROJECTED ACHIEVEMENT CONCERN OF HIGH AND LOW ACHIEVERS: MEAN CPST RATINGS OF PREVALENCE OF ACHIEVEMENT FANTASIES AND PRIMACY OF CONCERN WITH EXTERNAL STANDARDS OF EVALUATION

Projective Variables	High Achievers			Low Achievers		
	Boys (N-11)	Girls (N-7)	Total (N-18)	Boys (N-12)	Girls (N-9)	Total (N-21)
Achievement Fantasies (CPST)	2.3	2.7	2.5	2.3	3.0	2.7
Concern with External Standards (CPST)	1.2	1.7	1.5	1.6	1.7	1.7

Both measures: High vs Low Achievers - t=NS

Table 8 presents the means of high and low achieving children on the primacy of external standards in projected fantasies.

Group differences are also negligible on this measure, though the high achieving boys are set apart in slight measure from the other groups, tending less to project a concern with externalized evaluation of achievement and adequacy.

Any attempt to summarize a pattern of findings, from these data, would need to be extremely cautious. The material from projective data suggests that in the expression of achievement fantasies, as in direct self appraisal of academic adequacy, the children of the high and low achieving groups are not clearly different from each other. Perhaps this is partly due to the fact that our low achievers are not children who are failing at school in clear and dramatic ways and they do not need to adapt in their self appraisal and their fantasies, therefore, to grossly different realities. It is also likely, however, that the findings reflect the tendencies of different personalities within each group to handle realities somewhat differently -- high achievers who are assertive and high achievers who are diffident; low achievers who are concerned with their status and express it, low achievers who are not concerned, or who deny their concern. All of these factors would tend to make the groups overlap.

There are some trends in the data that bear further investigation, though they appear only at suggestive levels.

There is some indication, for instance, of a kind of mirror image between direct self appraisal and the projective evidence of achievement imagery or concern with external evaluation. Though differences are very slight, relative mean ratings do reverse as between the direct and projected measures for the high and low achieving groups (see Tables 6 and 8): more positive self appraisal is coexistent with less projective concern, less positive self appraisal with more concern. This trend is seen particularly in the low achieving girls, whose realistically lower self appraisal is accompanied by slightly more prevalent achievement imagery; to the extent that the pattern is valid, it would suggest that these girls are concerned with their achievement, are not satisfied or resolved in this area, and tend to express their concern through fantasy outlets. The high achieving boys, on the other hand, present a pattern of somewhat greater confidence and realism in self appraisal accompanied by lesser concern for evaluations by external criteria. Their rating of lesser concern may be an artifact of their tendency to hold back on matters of personal concern, as suggested in the previous section, but it is also possible that these boys are relatively resolved and realistic concerning their academic competence and its evaluation by others, and they do not dwell on these thema in their projected fantasies.

Attitudes and Feelings About School

a) Extent of Positive Identification with School

The children's attitudes and feelings about school were tapped through four techniques:

> Interview: in which questions about school life were part of a general exploration of the child's experiences and opinions.
>
> Sentence Completion Test: in which 6 of the 18 items had school-related stems ("One good thing about school..."; "When the teacher leaves the room..."; "Waiting in the principal's office..." etc.).
>
> Childrens Picture Story Test: in which one picture, depicting a boy writing and a female adult standing in the background, was included as a school room scene and almost universally perceived in these terms.
>
> Dictated Letter: in which the children's descriptions of themselves and their lives often included school-related material.

A composite rating of the child's attitude toward school was based on evaluation of material from the four techniques. Composite ratings were on a four point scale: clear negative feeling; ambivalent or mixed feeling; conforming, compliant attitude; positive, involved identification.

Table 9 presents the mean ratings on the extent of positive identification with school for high and low achieving children. Differences between the high and low achieving groups are negligible. More striking is the difference between girls and boys in both groups, with the girls more positively identified than the boys in each case. It is as if the school setting is a more acceptable milieu to the girls, regardless of the effectiveness of academic performance -- though it is the group of high achieving girls who appear most involved and positive in their attitudes toward school.

Table 9

POSITIVE IDENTIFICATION WITH SCHOOL: MEAN RATINGS OF HIGH AND LOW ACHIEVERS

	High Achievers			Low Achievers		
	Boys (N-11)	Girls (N-7)	Total (N-18)	Boys (N-12)	Girls (N-9)	Total (N-21)
Positive Identification with School: Composite Rating	2.1	3.2	2.7	1.9	2.8	2.4

High vs Low Achievers - t = NS

Table 10

QUALITY OF REACTION TO SCHOOL AUTHORITY: NUMBER OF HIGH AND LOW ACHIEVERS IN EACH CATEGORY

Category	High Achievers			Low Achievers		
	Boys	Girls	Total	Boys	Girls	Total
Rational	0	2	2	0	4	4
Passive-Conforming	4	5	9	9	2	11
Resentful	6	0	6	2	2	4
Rebellious	1	0	1	1	1	2

Rational, passive-conforming vs resentful, rebellious:
High Achiever Girls vs High Achiever Boys -
$X^2 = 4.86; p = \angle .05.$

b) Quality of Reaction to School Authority

A specific rating of the children's attitudes toward school authority was obtained from the same techniques. This rating was categorical, rather than scaled, and consisted of the following categories: rebellious; resentful; passive-conforming; rational. Table 10 presents the distribution of high and low achievers on these categories.

Though the pattern of reactions for the high and low achieving groups are generally comparable, there are a number of distinct and interesting patterns when boys and girls are considered separately.

First, the high achieving boys and girls are quite different. The high achieving girls are either passive-conforming or rational regarding school authority, while the boys tend more to be resentful.

Second, the low achieving boys present a particularly consistent pattern of passive acceptance and conformity.

Third, it is only among girls that a rational attitude toward school authority appears -- this attitude being defined as an ability to see the rules of school life as necessary means to a larger end, and a concomitant ability to assess rules and controls in terms of their logic and effectiveness. Though this attitude is proportionately most frequent among low achieving girls, it is also true that this group has some proportion of resentful and rebellious children while high achieving girls are all at peace, either actively or passively, with school authority.

In general, these data seem of some importance in understanding the reaction patterns of the four groups. The following section, reporting the content of attitudes, consolidates further some of the impressions suggested by this material.

c) Content of Attitudes and Opinions Concerning School

The material reported in the three subsections below was derived from direct interview data. The spread of reactions and verbalizations was fairly broad and differences in attitude between high and low achieving groups in general are not striking. The material itself is of some interest, however, regardless of the achievement groupings, since it represents a sample of child opinion about school, about teachers, about subject matter. The subsections below will briefly summarize major themes in the children's reactions and will indicate any patterns of difference in reactions of the achievement groups.

Evaluation of school and school life

In the course of the interview sessions, a hypothetical situation was presented to the children, as follows: "Suppose you were the principal of a school like this. Then what you thought about school would be taken very seriously. What kinds of things would you like to change? What would you be sure to keep?" The children responded mostly to the first part of the question -- what they would like to change -- and their responses ranged over a wide variety of content: physical improvements, curriculum content, and matters of an interpersonal nature relating to teacher-child interactions. Over half the responses stressed the wish that the teacher and other school authority figures be more permissive with the children or that the teacher be "fairer" in her treatment of the children (not select pets for errands, give time to finish work, not discipline children indiscriminately, etc.). The wish to change things in the direction of more permissive authority was the modal response for all achievement groups except the high achieving girls, for whom this seemed relatively unimportant. Among the high achieving boys, all but one response was concerned with the permissiveness or fairness of authority.

Those children who dealt with the "keep" part of the question were generally those who had been unable or unwilling to deal actively with the idea of changing things. Most of the responses indicated that the child would keep "everything," and this reaction come most notably from low achieving boys, whose tendency toward passive conformity has been noted above.

Evaluation of teachers

Interview responses concerning desirable qualities of a teacher are, again, varied.[1] In general, the children build an image of a teacher who does not yell or grow angry, who is "nice" to children and who is moderately strict in the way she runs the classroom and the work. In these responses, as in the reactions to an opportunity to change things in the school, qualities of interaction between teacher and children seem to be uppermost in the minds of the children — more important by far than the content or conduct of academic work.

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[1] See Appendix VI for verbatim illustrations of children's descriptions of a desirable teacher.

For the four achievement groups, modal responses regarding the desirable teacher are as follows: High achieving boys — no anger or yelling; high achieving girls — a general spread, with more importance to a "sense of humor" than in any other group; low achieving boys — "nice" and no anger or yelling; low achieving girls — "nice" and moderately strict. The high achieving boys present again a sense of resentment; the high achieving girls are again the most relaxed.

Evaluation of academic subjects

The children were asked in interview which school subject was their favorite and which they disliked the most.

In general, high and low achieving groups are not particularly different, but there are general sex differences. Boys like arithmetic significantly more than girls; boys tend to select this as a favorite subject and girls as a disliked subject ($X^2 = 4.90, p < .05$). This is a rather interesting distinction, in view of the fact that the boys and girls do not appear to differ in their mathematical competence (See Table 2 - Stanford Achievement scores). Girls tend to prefer reading to any other subject.

For the four achievement groups, modal responses are as follows: High achieving boys like arithmetic and dislike "nothing" (the latter a strongly modal response, occurring in 8 out of 11 cases); high achieving girls consistently prefer reading and dislike arithmetic; low achieving boys like arithmetic and report a spread of disliked subjects; low achieving girls like reading and dislike arithmetic, though their pattern is spread more than that of the high achieving girls.

The fact that the high achieving boys report that they do not dislike any subjects is particularly interesting. In view of their tendency to withhold and their general aura of anger, it is possible that they were essentially rejecting the question. They did, however, take opportunities to complain about other matters; it seems possible, therefore, that these competent achieving boys do, in fact, like the academic part of school life -- that they are skillful over a range of subject matter, that they enjoy the implicit problem solving and mastery attached to the curriculum and that they are satisfied with much of the content of intellectual activity in their school day.

In general, despite the tentative quality of the findings in this area, some patterns of attitude and feeling emerge from the data, particularly if the high and low achievers are subdivided into sex groups:

The high achieving girls seem most resolved and comfortable in the school milieu. They are the most actively involved and identified, least critical of the teacher and of authority aspects, apparently not involved in an interpersonal fight with the school adults. Whether they come to school predisposed to these attitudes and are thus able to operate with a pervasive competence, or whether they perceive their success and are thus able to view school life benignly is an open question, but this group, among the four, suggests the greatest sense of "fit" with the school as a setting and experience. Where they seem less resolved is in the area of self appraisal. Given their high level of objective performance, we might expect a clearer pattern of positive and certain self appraisal than they seem to actually indicate.

The high achieving boys present quite a different picture. They are relatively confident and assertive about their own ability, and it seems very possible, as they claim, that they enjoy their academic work and their own competence. They present a strong and consistent picture at the same time, however, of resentment and restlessness concerning the interpersonal aspects of school life, at least in relation to adults and authority. They are not positively identified with school and they are quite outspoken in their criticisms of over-control and unfair treatment. It seems part of this picture that they tend to withhold personal material and internally meaningful reactions, producing a pattern of cognitive effectiveness in impersonal tasks and relative deficit in more personally demanding intellectual situations. It is again a question whether this pattern follows from angry and defensive tendencies brought by these particular boys into the school situation, whether some of this boy-girl difference is an inevitable concomitant of differential patterns in development, or whether in some way the schools present an atmosphere more difficult for boys to adjust to than girls, thus drawing out these differential reactions.[1]

Patterns for the low achieving children are less clear in these data. There is a general quality of passivity in the reactions of the low achieving boys, however, that seems quite impressive. They are neither positive in their attitudes nor clearly resentful -- and, though they have areas of competence, they are not academically effective, in the terms by which teachers rate them. The school has not succeeded in mobilizing them and they seem to be coasting through the school situation, relatively uninvolved. The low achieving girls are, in a sense, more actively related to the school situation. They are not competent achievers, but they appear more identified with the school situation than the boys, more concerned with their status and not generally as passive.

While cause and effect are not clear, there is a general interaction suggested by these data among achievement status, the sex of the child, and the nature of attitudes and feelings about achievement and about school.

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[1] Data from the larger sample lends some plausibility to the latter possibility, since in the modern private school group - not included in this achievement sample -- the boys were rated as highly identified with their school, in contrast to the tendency in all public schools for the boys to be less identified than the girls.

Status In The Classroom Peer Group

In view of the pivotal importance of peer life at this stage of development, it is of some interest to explore the status of high and low achieving children with their peers. Is there any connection between academic status and the popularity of children with their classmates? Are high achieving children relatively isolated and unpopular, rejected by others as "bookworms," uninvolved in peer life? Are they more popular and sought after? Is there no discernible difference between groups, suggesting that this is a totally independent and individual matter?

Data relevant to this issue were derived from a sociometric technique, administered to part of the general study sample.[1]

> Sociometric Technique: A technique in which the child is asked to choose people he likes to do different kinds of things with. The technique is administered to the class group, but each child writes in an individual booklet. Items are verbally presented, with some prose to create a feel of the kind of situation: "Let's suppose you feel in a very special mood -- you feel like having a real gay time, laughing, telling jokes, giggling. Write down the child with whom you have the most fun doing this." There are 12 items (best friend; tell your troubles to; contest partner; person who knows you best; etc.)

A composite rating of popularity with classroom peers was derived for each child, based on the number of times he was chosen on the sociometrics and the number of children choosing him. Since classroom size differed somewhat, the children were rated in comparison with the other children of their own class group. The rating is on a 3 point scale.

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[1] Sociometrics were administered to 70 of the 105 study children; the sample was limited by problems of scheduling and administration, rather than any selective principle involving individual children.

Thirty of the 39 children in the achievement sample were among those taking the sociometric technique; the figures in the following table, therefore, are based on a reduced N, as indicated on the table.

Table 11 presents the mean ratings on peer popularity for the high and low achieving groups.

The differences between high and low achieving children are clear and striking. The high achievers are chosen a great deal more and by many more children than the low achievers, and this is clear both for the girls and for the boys. Though the composite rating is the most efficacious way of summarizing the data, perhaps it is more graphic to note in absolute figures that the average high achiever was chosen 30 times by members of his class as they responded to the dozen items, while low achievers were chosen an average of 13 times; the average high achiever, also,was chosen by 11 different children while the average low achiever was chosen by 5 different children.

It might also be noted that when the sociometric choices were tallied originally, a group of "stars" and "isolates" were identified in each of the schools. The "isolates" in the public schools were only 4 in number. They were chosen either not at all or only once — a dramatically atypical and rather poignant situation, meaning that they did not occur to any of their 30 or so classmates as desirable companions for any of the dozen

Table 11

POPULARITY WITH CLASSROOM PEERS: MEAN RATINGS OF HIGH AND LOW ACHIEVERS ON SOCIOMETRIC TECHNIQUE

	High Achievers			Low Achievers		
	Boys (N-9)	Girls (N-6)	Total (N-15)	Boys (N-11)	Girls (N-4)	Total (N-15)
Popularity with classroom peers: Composite Rating	2.33	3.00	2.60	1.55	2.00	1.67

High vs Low Achievers: $t = 4.04$; $p = < .01$.

situations described to them. These four children included two low achievers and one high achiever, and no general trend can be deduced from this small and rather special group. The "stars", however -- the centrally popular children -- are predominantly high achievers. Of the 18 children identified as "stars" in the three public schools, 10 (4 boys, 6 girls) are high achievers; only 1 is a low achiever.

It would seem in general that there is a clear connection between academic status and status with one's peers in the classroom group. If this connection is not absolute -- note that some 7 of the 18 stars are in the middle group of achievers -- it is still clear that the general tendency for high achieving children to be popular and central with their peers is a strong one, and certainly the low achieving child is not apt to be central.

In these data, there is no appreciable pattern of boy-girl differences.[1] It is of some interest, however, in view of previous discussions, to note one fact about the high achieving boys that emerges on inspection of the content of items for which children are chosen. The high achieving boys tend to be chosen, more than children of other groups, as a best friend, to share jokes and have fun with, to go to the movies with, to have as an overnight guest or as a contest partner. On the items calling for "the person you know best" or "the person who knows you best," however, only one high achieving boy was chosen on each item, while 4-5 low achieving boys were chosen.[1] There is some parallel suggested with the pattern of cognitive performance discussed above, wherein these high achieving boys are highly effective on impersonal tasks, but do not seem to share and express personal, inner material. Perhaps with their peers too they are successful and sought after, good pals and friends and partners -- but not at the deep level of knowing and being known to others.

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[1] Though the girls' means on the composite rating are somewhat higher than the boys' means, this is partly an artifact of the 3 point scale. On the contributing tallies, boys' means are slightly higher. In all instances, the differences are relatively negligible.

Why, then, is there such a strong connection between academic status and peer popularity in this group of children?

As one possible explanation, we can look to the children themselves, positing an underlying energy and capacity for active approach and mastery, among the high achievers, that may permeate both their academic behavior and make them, at the same time, attractive to their peers. Studies of effective people -- starting perhaps with the Terman studies of the development of gifted children -- have tended to suggest that those who do well in one area are not necessarily weak in others (unpopular, physically less developed, etc.) but are, often enough, effective along several fronts. At times, this may be because the same capacities for making contact and actively taking hold are involved. Perhaps it is the lack of this energy and assurance that accounts for the connection between low achievement and low peer status. It seems possible that some self defeating hesitation and ineffectiveness of a general nature may keep low achievers from both the kind of "encounter" with academic demands that makes for recognized achievement status _and_ the kind of impact on their peers that makes for greater popularity and higher peer status.

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[1] The figures are generally lower on these items than on others since children tended more to name adults, but there were still many peer choices.

In searching for explanations of our findings, however, we need probably to look beyond the children themselves and consider their family backgrounds, their classroom environments and the value systems within which they live. The recognition of a child as an achiever, as signified by higher marks and the attitude of the teacher, is in itself a source of higher status for the child among his peers. These children, it should be remembered, are upper middle class children. They come from homes with highly educated parents, usually of college level, and they represent a part of the culture where learning and effective functioning in school, both in the present and with an eye on the future, are highly valued. For this group of children, the fact that Johnny is favored and highly regarded by his teacher is probably a positive factor in their evaluation of him, though they might consciously deny this and though this in _itself_ might not carry Johnny to "star" status. It seems unlikely that the clear connection we find between academic status and popularity with classroom peers would hold in that part of the population which is generally described as disadvantaged and where the value of school and learning is certainly a less obvious "given" than for the children of our sample. In such a group, peer status almost surely depends on other factors and skills,and there may be, in some instances, a reverse relationship, whereby rejection of academic effort is part of a peer group attitude and a requisite for adequate group standing.

One more relevant factor, suggested by these data, might be noted. The three public schools represented in this achievement sample have different attitudes and values in their educational approach to children, with Browning considered the most traditional and Dickens the most modern of the three schools. In the case of the sociometrics, the children from Browning appear to show the clearest connection between peer status and academic achievement, while the children from Dickens show the least. Four children of Browning have "star" status on the sociometrics, and all are high achievers, while the one "isolate" is a low achiever. In Dickens, however, there is an actual crossing over of status on these two facets -- the only school in which this occurs: of the four "stars" in Dickens,two are high achievers, one a middle achiever and one is a low achiever; the only "isolate" in the group is a high achiever. Though one would have to check other attributes of the particular children involved, it seems possible that the most traditional school, which sets up the greatest clarity about who the achieving children are and attaches the most reward value to this demonstrated achievement competence, thereby transmits to the children the strongest adult message concerning the importance of particular children. The more modern school transmits a less global evaluation to the children, and the status of a child with his classroom peers may thus be determined by a more open and perhaps more child-derived set of criteria.

In general, the sociometric data suggest an intricate set of factors, involving the nature of the children, their families and their schools, which influence the connection between academic status and popularity with classroom peers.

Self Appraisal of Peer Status

The Stick Figure Scale provides data for evaluating the children's appraisal of their own popularity. One item offered the following choice: "Here's a child who's pretty sure all the kids like him — that he's popular." vs "Here's a child who lots of times isn't so sure the other kids like him so much." The child was then asked, "Which one is more like you?", and his response was coded on a 3 point scale.

Though there is a clear difference in their objective popularity, the high and low achieving children do not appraise themselves differently in response to this item. Of the four groups, however, the high achieving boys are most positive in self evaluation and the high achieving girls least so. This pattern suggests again a verbal assertiveness on the part of the high achieving boys that coincides well with reality when they are successful, and a verbal diffidence on the part of the high achieving girls which amounts to a notable understatement, on occasion, of their realistic status. The responses to this item, thus, seem less reflective of specific appraisal concerning peer status than of a general style of presenting oneself to the world — though the extent to which this style accurately reflects deep self feeling is unclear.[1]

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[1] A composite score from the Stick Figure Scale, labeled "Self Satisfaction and Confidence" (based on 4 items, including the peer and work competence items described in this report) yielded the following order of achievement groups, from most to least confident: high achieving boys, low achieving boys, low achieving girls, high achieving girls. The distinct positions of the high achieving boys and the high achieving girls in verbal self-presentation are thus clearly summarized. It is interesting, however, that in drawings of the human figure, considered another level and modality of self-presentation, the high achieving girls are rated as strongest in their presentation, suggesting that the relation between facets of self-feeling and modalities of self-expression are not only complex but possibly distinct for boys and girls.

Family Background Factors

The previous sections have considered possible correlates of achievement status in terms of other facets of child functioning; they have been concerned with the question of what other attitudes and behaviors typify the children designated as relatively high and low achievers. In this section, however, the values, attitudes and behavior of the parents of high and low achievers will be considered. Do these two groups of children come from families which differ consistently in their child rearing attitudes, in their values concerning education and achievement, in their ways of relating to children or their feelings as parents?[1]

In exploring these questions, material concerning the parents -- more specifically, the mothers -- will be presented in three sections, dealing with three aspects of parent attitudes and behavior: 1) the general "modern" or "traditional" orientation of the parents; 2) the attitudes, expectations and implicit definitions of the mothers concerning "achievement"; 3) the extent to which the mother is integrated and consistent in her role as a mother, and feels generally satisfied with the child.

The material concerning the parents was derived from two techniques -- a Questionnaire and an Interview -- administered to the mothers.[1]

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[1] The parent groups were compared in terms of an index of socio-economic level and of parent education, showing no significant differences on either measure. Differences in children's achievement status are not traceable, therefore, to differences in these basic factors of family status and background.

> Questionnaire: The questionnaire tapped primarily the attitudes and values of the mothers concerning child rearing and education, though it also covered background material relevant to socioeconomic status, family history, early child development, etc. Responses were generally of an agree-disagree or multiple choice variety.
>
> Interview: The interview with the mother, approximately two hours long, centered on values and practices in child rearing and on the mother's views concerning the education of the child. It was a semi-structured interview, in that the interviewer was guided by an outline of topics and questions but had considerable scope for discussion and follow up of ideas.

In the following sections, the mothers of high and low achieving children will be compared in terms of their child rearing values and attitudes, and their enactment of their parental roles.

Modern Traditional Orientation[1]

A major variable in analyzing the parent questionnaire and interview was the "modern" or "traditional" orientation of the home. In describing this concept, and in formulating the coding-rating schemes for its measurement, it was considered, in general, that traditional and modern parents strike a different balance in the value they place on the child's conformity and adaptability to society's standards and values vis a vis the value they place on the individual child's needs, interests, and rate of development, and that they differ in the ways in which they perceive and enact their parental roles as a consequence of these different views. Thus, the most traditional homes were seen as those in which socialization of the child is primary -- where stress is placed on the child's adaptation to the expectations and standards of his society, where children are trained toward socially acceptable behavior, and where adults exercise authority as a fixed prerogative of their adult role. The most modern homes were seen as those in which development of the child is primary -- where there is an individualized conception of the child's needs and rate of growth, where there is an attempt to balance socialization demands with provisions for impulse gratification and the expression of individual qualities, and where the adults exercise authority in a relatively functional and flexible way.

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[1] See Part I of this report for fuller discussion of the techniques, the modern-traditional orientation variables and the details concerning analysis of family data.

The modern-traditional orientation of the mothers was measured in two ways: The mother's conscious, professed ideology was measured through responses to the questionnaire, which contained items relevant to the modern-traditional variable. Responses were coded and a total score was derived reflecting the degree of modern or traditional orientation in child rearing ideology.

A more inclusive rating of the modern or traditional orientation of the mother -- including both the conscious ideology and the actual enactment of the parental role -- was based on interview and questionnaire data. The interview was rated on a series of scales, including parental Enactment of the Authority Role, Emphasis on Standards of Behavior and Achievement, and Encouragement of the Child's Individual Interests and Expression; these ratings were combined with ideology scores into an overall rating, along a 7 point scale, of Modern Traditional Orientation.

Tables 12 and 13 present the modern-traditional ideology and orientation of the mothers of high and low achieving children.

Table 12 presents the mean ideology scores, as obtained from the questionnaire. A score of 2-62 is considered predominantly traditional, a score of 63-89 mixed or middle, a score of 90-113 predominantly modern.

The mothers of high and low achieving children are significantly different in their expressed child rearing views. The mothers of high achievers tend toward a mixed or modern ideology, the mothers of low achievers toward a traditional viewpoint.[1]

It is the mothers of the high achieving girls, however, who are most modern in their viewpoint. They are clearly more modern than the mothers of low achieving girls, whose expressed ideologies are the most notably traditional.

Table 13 presents the distribution of high and low achieving children among homes with traditional, modern or mixed orientation,[2] as rated from the interview and questionnaire.

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1. In order to obviate the effects of extreme scores, the differences were tested not only by comparison of means but by comparing the number of scores above and below the median for high and low achieving groups. The parent groups are still reliably different, with mothers of high achievers more modern in their expressed ideology concerning child rearing than the mothers of low achievers ($X^2 = 4.2; p < .05$).

2. "Traditional" homes are those rated 1-3 on the 7 point scale; "middle" homes are those rated 4, (no clear valence in either direction); "modern" homes are those rated 5-7.

Table 12

CHARACTERISTICS OF MOTHERS OF HIGH AND LOW ACHIEVERS: MEAN SCORES ON MODERN-TRADITIONAL IDEOLOGY, ATTITUDES TOWARD ACHIEVEMENT AND ROLE SATISFACTION AND ACCEPTANCE

Mother	High Achievers			Low Achievers		
Characteristics	Boys	Girls	Total	Boys	Girls	Total
Modern-Traditional Ideology (Questionnaire)	75.2[1]	83.7	78.5	69.0	53.0	62.1
Attitudes Toward Achievement (Questionnaire)	17.9[2]	15.6	17.0	18.5	21.1	19.8
Consistency, Integration, Satisfaction in Mother-Role (Composite Rating)	17.45	16.57	17.11	15.08	15.33	15.19

1. Higher means indicate more modern ideology
2. Higher means indicate more traditional attitudes

Modern-Traditional ideology: Mothers of High vs Low Achievers - $t = 3.21$; $p = < .01$;

Mothers of High Achieving Girls vs Low Achieving Girls - $X^2 = 8.9$; $p = < .01$;

Mothers of Low Achieving Girls vs Low Achieving Boys - $X^2 = 4.08$; $p = < .05$.

Attitudes toward achievement: Mothers of High vs Low Achievers - $X^2 = 3.39$; $p = < .05$;

Mothers of High Achieving Girls vs Low Achieving Girls - $X^2 = 3.37$; $p = < .10$

Consistency, integration, satisfaction mother-role: Mothers of High vs Low Achievers - $t = 1.18$ NS.

Table 13

MODERN TRADITIONAL ORIENTATION OF MOTHERS: NUMBER OF HIGH AND LOW ACHIEVERS IN HOMES WITH TRADITIONAL, MIDDLE OR MODERN ORIENTATIONS

Modern Traditional Orientation	High Achievers			Low Achievers		
	Boys	Girls	Total	Boys	Girls	Total
Traditional	6	3	9	8	8	16
Mixed	2	1	3	4	1	5
Modern	3	3	6	0	0	0

High vs Low Achievers: $X^2 = 8.3$; $p = <.02$.

Two facts are clear from the table, both confirming the findings based on expressed ideology:

First, the mothers of high achieving children are significantly more modern in their child rearing orientation than the mothers of low achieving children. Though the distribution of traditional, mixed and modern parental orientation is skewed toward the traditional end,[1] there is nonetheless a clear association between the nature of parental orientation and the achievement status of the children: children of the modern mothers do not appear at all among the low achievers; children of the traditional mothers tend to appear more among the low achievers than the high achievers.

Secondly, the association between mother's orientation and the achievement status of the child is much clearer for the girls than the boys. Among the boys, there is a somewhat comparable spread of parental orientation for high and low achieving boys, though no low achieving boy has a "modern" mother. Among the girls, however, there is a strong association between traditional orientation and low achievement, and a relatively high percentage of modern mothers among the high achievers, though the absolute numbers are small.

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[1] This skewed distribution is representative of the complete public school sample of the larger study (N=76), wherein 38 homes are rated as traditional, 23 as middle or mixed, 15 as modern.

Mothers' Attitudes Toward Achievement

The mothers' attitudes toward achievement are not, of course, completely independent of their general modern-traditional orientation, as defined above, but they have been tapped and rated as separate entities on the questionnaire and interview and are reported here for their special relevance to the achievement status of the children.

The questionnaire contains seven items specifically relevant to attitudes toward achievement. They present situations which oppose a relatively traditional way of defining school work and achievement to a relatively modern way. (See Appendix VII for items and format). The constellation of choices considered relatively traditional stresses the need to master a basic body of facts and skills, the demonstration of subject matter competence, the dichotomy between "serious" subjects and more expendable expressive or recreational activities, and the importance of comparing a child's academic standing with other children. The constellation of choices considered relatively modern stresses a broader definition of appropriate school content, with value attached to expressive and creative activities, and emphasizes intellectual initiative and depth of understanding more than mastery over a body of facts, relative status in the child group, or demonstrated competence with subject matter.

Table 12 presents the mean ratings of the mothers of high and low achievers on the achievement items of the questionnaire, higher means here designating more traditional attitudes.

The mothers of high achievers are characterized significantly more by a constellation of modern attitudes toward achievement and the mothers of low achievers are characterized by more traditional concepts and emphases. As in the more general measures reported above, however, the mothers of high achieving girls are most modern and those of low achieving girls most traditional.

The interview ratings in this area follow the same general pattern, with the mothers of low achievers more concerned with their children's ability to live up to fixed standards of behavior and achievement and more apt to exert pressure and control towards these ends. The low achieving girls are not actually pressured and controlled in these areas more than the boys, it appears — though in many ways their mothers have had the most strictly socializing orientation — but the high achieving girls emerge consistently on all measures as the group least subject to conventional definitions, externally determined standards, and pressures to conform and achieve.

Consistency, Integration and Satisfaction in the Mother-Role

In evaluating the importance of the relationships established between child rearing and achievement orientations of the mothers and the achievement status of the children, it seemed important to check other qualities of the mothers in their roles as parents. Are the mothers of high and low achieving children also different in ways not reflective of modern-traditional orientations? Are they, for instance, more or less satisfied with their children?

more or less consistent or integrated as mothers?

The mother interviews were rated for three variables considered conceptually independent of modern-traditional viewpoints; the mother's integration of her mother role, her consistency in her child rearing approach, her overall satisfaction with her child.[1] These variables were rated separately and were also combined to form a composite rating of the mother's role satisfaction and acceptance — her comfort as a person in her mothering role.

Table 12 presents the means of the mothers of high and low achieving children on the composite rating of role satisfaction and acceptance.

The mothers of high and low achievers are not significantly different, nor are the mothers of any of the sex sub-groups. A separate statistical check on the variable of mother's satisfaction with her child, which might be considered of special importance in terms of children's achievement, also showed no significant differences.

These data do not indicate a connection between the achievement status of the children and the qualities of the mother that have to do with her integration, her consistency or her satisfaction with her child. No achievement group is characterized by mothers who are especially scattered, erratic or rejecting. What does seem to be relevant is the extent to which the mother's viewpoint concerning child development and behavior holds the child to general standards, fosters achievement on a competitive basis, is relatively stereotyped in what is considered evidence of the child's progress and accomplishment. These data suggest an inverse relationship between this relatively traditional orientation and the academic effectiveness of child functioning, even when it is defined essentially in terms pertinent to this value system. In this sample of public school children, it is the children whose mothers view them in more individual terms and value a broader, more differentiated kind of growth who, in fact, are selected as relatively high achievers -- demonstrably successful in their academic performance.

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[1] See Part I of this report.

It is partly misleading, however, to summarize these findings in terms of high and low achieving "children." Though statistical differences often carry for the total high and low achieving groups, it is basically the girls whose home backgrounds are clearly different. The high achieving boys, for instance, come from homes less consistently "modern" than those of the high achieving girls, both in general terms and in terms of specific pressure to achieve, and their homes are not strikingly different, in some respects, from those of the low achieving boys. The general constellation of home attitudes and pressures is not clearly predictive in this study for the boys: some react to competitive achievement standards and pressures with effective academic functioning and others do not. The extent to which these data reflect the fact that informants were mothers and that we have no direct data on father attitudes is not clear. The data do suggest, however, that home orientation and achievement attitudes, as expressed by mothers, do not affect boys as predictably as girls.

The home orientation data do predict the academic functioning of the girls, however, with a clear association in this sample between the modern or traditional viewpoints and practices of the mothers and the achievement status of the children. In this connection, the forces of interaction may be complex, with the mothers affecting the children's performance and the children's performance in turn affecting the mother's attitudes and behavior. Thus, it is quite possible that the mother of the successful girl has little need for conventional emphases and pressures, while the mother of the low achieving girl redoubles her concern and pressure in the face of her child's standing, and our measures may partly reflect these reactions. It is likely, however, that the mother's orientation has a basically stable rather than reactive quality, and that it is the line of influence from mother to child that we are primarily measuring, particularly since our measures cover a broad scope of attitudes and practices beyond those directly relevant to achievement behavior.

What the low achieving girls of this sample experience in their homes -- and particularly from their mothers -- is an emphasis on socially acceptable behavior, on deference to authority, and on a way of defining schooling and achievement that highlights conventional, competitive standards and evaluates the child in these terms. It seems very possible that this atmosphere is traumatic for these girls, tending to hamper rather than encourage potential and causing a perpetuation of mediocre or poor functioning as the child experiences her relative lack of success and knows it to be an important failure in the eyes of her mother.

What the high achieving girls experience in their homes and in relation to their mothers is a more open, individually oriented and less pressured attitude. It seems likely that this is a facilitating experience, freeing them for relatively effective and expressive functioning.

It is obvious that the parent qualities we have measured are probably relevant not only to the achievement status of the children but to other aspects of their functioning as well -- e.g. the relatively imaginative and personalized reactivity of the high achieving girls. It seems most useful, however, to deal with these presumptive connections in the context of the next section, which will summarize the constellation of findings concerning the high and low achieving boys and girls.

Summary and Discussion

This section of the report has been concerned with a major area of challenge in the life of the elementary school child -- the challenge to intellectual mastery and to successful achievement in school. In order to explore the patterns of more and less successful children, a group of high and low achievers was selected from the larger available sample. Selection was based on grades and teachers' evaluations, and "high" and "low" achievement was defined in relative terms, since almost all children of this sample functioned at least at grade level. The high and low achievers were compared on a series of dimensions, derived from the techniques administered to the children as part of the research procedure and relevant to several areas of functioning: cognition in both goal directed and unstructured situations, attitudes and feelings about achievement and school, status in the classroom peer group, and family background factors.

In summarizing the results, it is apparent that the major focus must be on the different findings for the boys and girls within the high and low achieving groups, since the bulk of the findings occurred, or were made more meaningful, when the sex subgroups were examined separately.

It is possible, however, to note three areas where general differences were established between the high and low achieving children: 1) In task oriented and goal directed research situations, the cognitive functioning of high achieving children as a group was clearly and consistently more effective than that of the low achievers, though this superiority in performance was most evident on verbal-conceptual tasks, less so on non verbal. The relative strength of the high achieving children as a group, however, did not extend to cognitive functioning in relatively unstructured situations, where the challenge was open ended rather than problem oriented and the child was required to think and react from within himself.

2) The high achieving children were more popular with their classroom peers than the low achievers — a finding which may reflect in part the middle class background of these children and the high status attached to successful school achievement.

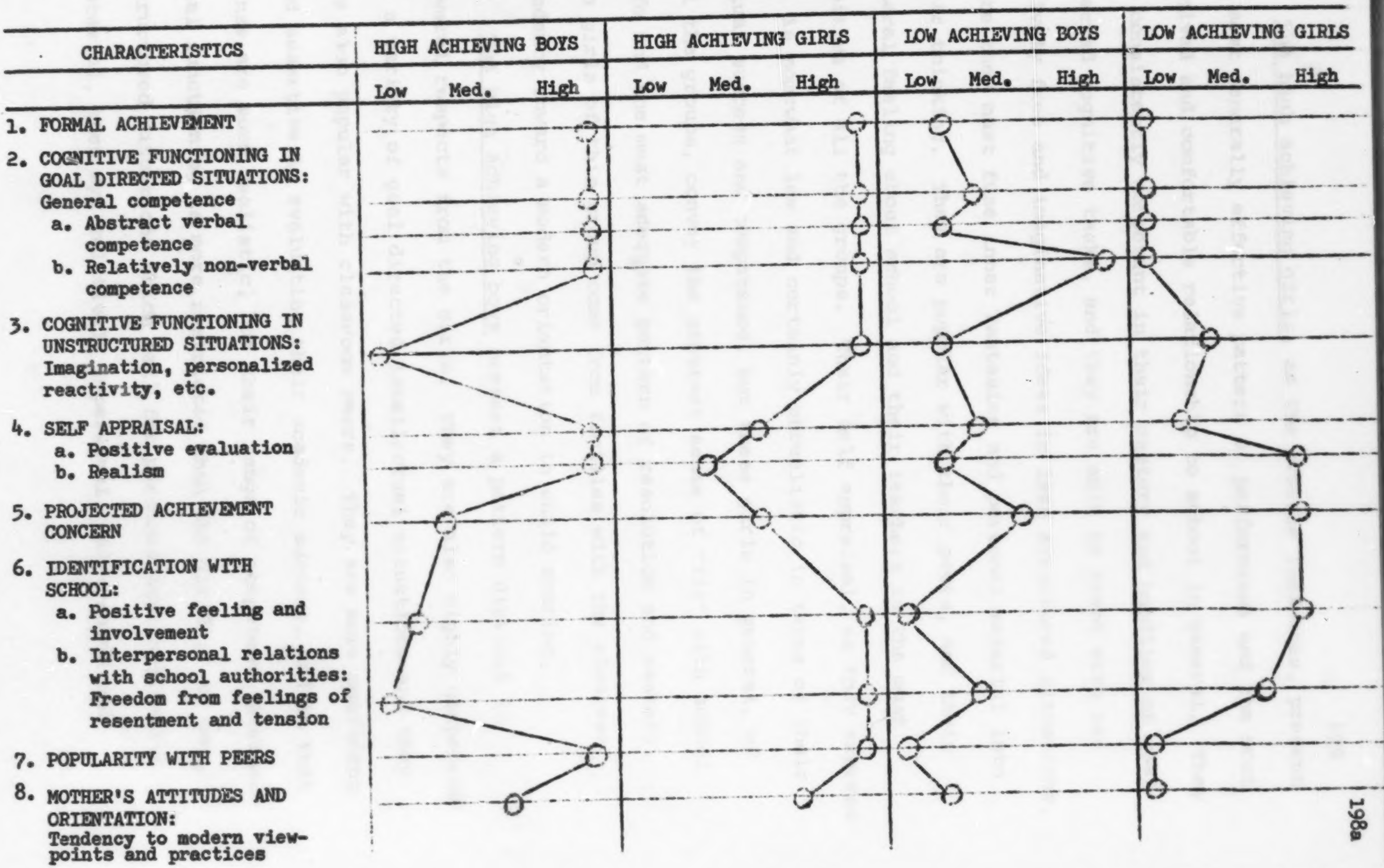
3) There was a general association of certain home background factors with high and low achievement. Relatively modern attitudes and orientation on the mother's part, with respect to child rearing in general and achievement in particular, were related to higher school achievement. Relatively traditional viewpoints, by which the mother emphasizes deference to authority, holds her child to generalized standards and is relatively stereotyped in what she considers evidence of achievement, were related to lower school achievement. The mother's general satisfaction with her child and her consistency and integration as a mother showed no apparent relationship to the child's achievement.

In other areas there were no clearly demonstrated differences between the total high and low achieving groups — no consistent differences in their achievement fantasies, in their self appraisal of academic adequacy, in the nature or content of their attitudes toward school, teachers, subject matter of study.

In several of these areas, as will be noted below, there were interesting and meaningful differences when sex subgroups were compared. In relation to achievement motivation, however, there was no clear association or predictive value either for total high and low achieving groups or for high and low achieving boys and girls. This is of some special interest, in view of the growing literature concerning achievement motivation. Recent research studies have presented both positive and negative evidence; some have demonstrated a connection between measurable achievement motivation and performance, while others have not (Crandall, 1963). In some of the studies, a direct predictive connection has been established for boys but not for girls (Sears, 1962). In our sample, no direct association between achievement fantasies and academic success has been established either for boys or girls.

In general, one of the major findings in this study of achievement correlates has been the difference in the reaction patterns of boys and girls with similar achievement status. The profiles of high and low achieving boys and girls (see accompanying chart) represents a summary in graphic form, of their relative standing on the characteristics we have measured.

PROFILES OF HIGH AND LOW ACHIEVING BOYS AND GIRLS: RELATIVE STANDING ON A SERIES OF CHARACTERISTICS



The high achieving girls, as the profile indicates, present the most generally effective pattern of performance and the most resolved and comfortable relationship to school in general. They are consistently competent in their mastery and handling of goal directed cognitive tasks, and they are able to react with relatively free and imaginative ideas in less structured situations, where they must fuse inner fantasies and personal material into their thinking. They are popular with their peers, and their general feeling about school and their teachers is the most positive of all the groups. Their self appraisal, as they express it, is somewhat low and certainly unrealistic in terms of their actual success and competence, but these girls in general, of all the groups, convey the greatest sense of "fit" with school life and the most adequate pattern of resolution and mastery. The girls of this group come from families with the clearest tendency toward a modern orientation in child rearing.

The high achieving boys present a pattern distinct in several respects from the girls. They are also highly competent in a variety of goal directed intellectual situations and they are also popular with classroom peers. They are more confident and assertive in evaluating their academic success, and in that sense are more realistic, but their range of competent intellectual functioning is more restricted than the girls'. In unstructured situations which call for personal and imaginative material, they are relatively impersonal, constricted and ineffective. In relation to school, they tend not to be positively identified; they seem to feel over-controlled and unfairly treated, and they are resentful and restless concerning the interpersonal aspects of school life, at least in relation to adults. They seem, however, to enjoy their academic work, the intellectual challenge it implies, and their own mastery and competence in this area. The home backgrounds of these boys tend to be more traditional than those of the high achieving girls -- and it might be noted that most of them are also attending traditional schools.

The low achieving girls show the most consistently ineffective pattern of cognitive functioning in goal directed situations. In more open situations, however, they appear able to express their ideas with a degree of imagination and personal investment that compares favorably with the boys of both high and low achieving groups. They evaluate their academic performance, rather realistically, as relatively low. They are not popular with their peers, but the school situation seems in general to have positive features for them and to be important to them. They are more positively identified with school than the boys of either group, more obviously concerned with their effectiveness and status and more actively involved in the school situation than low achieving boys. Of the four groups, these girls come from the most traditional home backgrounds.

The low achieving boys present a pattern of particular strengths and weaknesses in task oriented cognitive functioning.

Like the low achieving girls, they do relatively poorly on self directed, verbal-conceptual tasks, but they show considerable cognitive strength, comparable to the high achievers, in contexts which are relatively non verbal and offer concrete material for problem solving. This strength may tend to go unrecognized in the school setting. These boys are not popular with their peers, and their general involvement in school appears to be low. They are not actively resentful and rebellious, in the manner of the high achieving boys, but neither do they have a discernible area of satisfaction and involvement, and they give the impression of passively coasting in the school situation. The home backgrounds of this group are generally traditional, and most of these boys attend traditional schools.

In a number of ways these findings seem pertinent to the current stream of research concerning achievement. A recent review of research studies (Crandall, 1963) has pointed out the growing conviction that the patterns, meanings and antecedents of achievement motivation and behavior are different for boys and girls, and has indicated that there is considerable interest but contradictory evidence concerning parental attitudes as antecedents of successful achievement. Some studies have suggested that positive parent attitudes foster high achievement; others have suggested that negative attitudes (pressure, rejection) correlate with high achievement but may foster less desirable developments at the same time, such as early conformity to adult values, competitive drive, a lack of intellectual creativity (D'Heurle, Mellinger & Haggard, 1959; Drews and Teahan, 1957; Gough, 1953; Haggard, 1957).

Our data certainly support the idea that sex differences are important in the achievement constellation: the boys and girls of this sample, even when their general achievement level is similar, tend to differ in the nature and scope of their intellectual competence, in their investment and confidence concerning achievement (see Crandall, 1962; Sears, 1962) in the total quality of their attitudes toward school.

The question of home antecedents is a complex one. In this sample, the mother's orientation appears to predict achievement success for the girls, and the data support the idea that more positive and supporting attitudes foster high achievement, for girls, while more negative, pressuring attitudes make for low achievement. In the case of the girls, in fact, the more positive background seems to predict a generally resolved and effective attitude and performance in school.

For the boys, however, the mothers' attitudes, as we have measured them, do not predict achievement status. Boys from fairly similar homes seem to react in different ways. It seems of some interest, however, that it is among the high achieving boys of the sample that a constriction in emotional reactivity and creative thinking appears. Where this has been noted in high achievers studied elsewhere it has been associated with relatively pressuring backgrounds (Gough, 1953; Haggard, 1957). It seems possible that the high achieving boys of this sample suggest more of this syndrome than the high achieving girls because more of them live in traditional homes and more of them attend traditional schools. Some of their resentful feelings about school adults and authority may be traceable to the same factor.

In general, the findings in this area suggest that the pattern of skills, reactions and antecedents surrounding the child's achievement in his own school setting are apt to be complex. Each of the sex subgroups within the high and low achieving categories of this sample has shown a unique pattern of responses. They have varied in their intellectual competence under different conditions and with different materials, in their attitudes toward work and their own competence, in their status with their classroom peers, and in their sense of involvement and resolution concerning the procedures and important figures in their daily life at school. It seems evident that the child's mastery in school is best understood and fostered if he is viewed not in terms of global success but in terms of a pattern of reactions differentiated along dimensions such as these.

BIBLIOGRAPHY I

Aronfreed, J. The nature, variety and social patterning of moral responses to transgression. J. abnorm. soc. Psychol., 1961, 63, No. 2, 223-240.

Baldwin, A. L. Socialization and the parent-child relationship. Child Develpm., 1948, 19, No. 3, 127-136.

Baldwin, A. L., Kalhorn, J., and Breese, F. H. Patterns of parent behavior. Psychol. Monogr., 1945, 58, No. 3.

Bronfenbrenner, U. The changing American child -- a speculative analysis. J. soc. Issues, 1961, 17, No. 1, 6-18.

Bronfenbrenner, U. Toward a theoretical model for analysis of parent-child relationships. In J. C. Glidewell (Ed.), Parental Attitudes and Child Behavior. Charles C. Thomas, 1961.

Centers, R. and Centers, Louise. Social character types and beliefs about child-rearing. Child Develpm., March, 1963, 34, No. 1, 69-78.

Crandall, V., Katkovsky, W., and Preston, Anne. Motivational and ability determinants of young children's intellectual achievement behaviors. Child Develpm., 1962, 33, 643-661.

Crandall, V. Achievement. In Stevenson, H. W. (Ed.), Yearb. nat. Soc. Stud. Educ., 1963, 416-469.

D'Heurle, A., Mellinger, Jeanne, and Haggard, E. Personality, intellectual, and achievement patterns in gifted children. Psychol. Monogr., 1959, 73, (Whole No. 483).

Drews, Elizabeth and Teahan, J. Parental attitudes and academic achievement. J. clin. Psychol., 1957, 13, 328-332.

Gough, H. What determines the academic achievement of High School students. J. educ. Res., 1953, 46, 321-331.

Grant, Q. R. and Kantor, Mildred B. Some limitations of the effects of maternal attitudes on child behavior. In J. C. Glidewell (Ed.), Parental Attitudes and Child Behavior. Charles C. Thomas, 1961.

Guilford, J. P. The structure of intellect. Psychol. Bull., 1956, 53, 267-293.

Haggard, E. Socialization, personality, and academic achievement in gifted children. School Review, 1957, 65, 388-414.

Hoffman, L. W., Rosen, S., and Lippitt, R. Parental coerciveness, child autonomy, and child's role in school. Sociometry, 1960, 23, 15-22.

Hoffman, M. L. Child-rearing practices and moral development: generalizations from empirical research. Child Develpm., 1963, 34, 295-318.

Kagan, J. and Moss, H. A. Birth to Maturity. New York: Wiley, 1962.

Levinson, D. and Huffman, Phyllis E. Traditional family ideology and its relation to personality. J. Pers., 1955, 23, 251-273.

Loevinger, Jane and Sweet, Blanche. Construction of a test of mothers' attitudes. In J. C. Glidewell (Ed.), Parental Attitudes and Child Behavior. Charles C. Thomas, 1961.

McClelland, D. C., Atkinson, J. W., Clark, R. A., and Lowell, E. L. The Achievement Motive. Appleton-Century-Crofts, 1953.

McCord, W., McCord, J., and Verden, P. Familial and behavioral correlates of dependency in male children. Child Develpm., 1962, 33, 313-326.

Miller, D. R., and Swanson, G. E. Inner Conflict and Defense. New York: Henry Holt & Co., 1960.

Peterson, D. R., Becker, W. C., Helmer, L. A., Shoemaker, D. J., and Quay, H. C. Parental attitudes and child adjustment. Child Develpm., 1959, 30, 119-130.

Radke, M. J. Relation of parental authority to children's behavior and attitudes. Univer. of Minn. Child Welfare Monogr., 1946.

Radke-Yarrow, Marion. Problems of methods in parent-child research. Child Develpm., 1963, 34, 215-226.

Sanford, R. N., Adkins, Margaret M., Miller, R. B., and Cobb, Elizabeth A. Physique, personality and scholarship. Washington, D.C.: Monogr. Soc. for Res. in Child Develpm., 1943, 8, No. 1.

Saugstad, P. Incidental memory and problem solving. Psychol. Rev., 1952, 59, 221-226.

Schaefer, E. S. A circumplex model for maternal behavior. *J. abnorm. soc. Psychol.*, 1959, *59*, 226-234.

Schaefer, E. S., and Bell, R. Q. Development of a parental attitude research instrument. *Child Develpm.*, 1958, *29*. No. 3.

Schaefer, E. S. and Bayley, Nancy. Maternal behavior, child behavior, and their intercorrelations from infancy through adolescence. *Monogr. Soc. for Res. in Child Develpm.*, 1963, *28*, No. 3.

Sears, Pauline S. Correlates of need achievement and need affiliation and classroom management, self-concept, achievement and creativity. Unpublished manuscript, Lab. of Human Develpm., Stanford U., 1962.

Sears, R. R., Maccoby, Eleanor, and Levin, H. *Patterns of Child-Rearing*. Evanston, Ill.: Row Peterson, 1957.

Torgoff, I. Synergistic parental role components: application to expectancies and behavior: consequences for child's curiosity. Paper read at Amer. Psychol. Ass. Convention, Chicago, 1960 (mimeo).

Watson, G. Some personality differences in children related to strict or permissive parental discipline. *J. Psychol.*, 1957, *44*, 227-249.

Weisberg, P. S. and Springer, Kayla J. Environmental factors in creative function. *Arch. gen. Psychiat.*, Dec. 1961, *5*, 554-564.

Werner, H. and Kaplan, E. The acquisition of word meanings: a developmental study. *Monogr. Soc. Res. Child Develpm.*, 1952, *15*, No. 1.

Winder, C. L. and Rau, Lucy. Parental attitudes associated with social deviance in pre-adolescent boys. *J. abnorm. soc. Psychol.*, 1962, *64* (6), 418-424.

Witkin, H. A., Dyk, R. B., Faterson, H. F., Goodenough, D. R., and Karp, S. A. *Psychological Differentiation*. New York: Wiley, 1962.

BIBLIOGRAPHY II

Selected Papers Reporting on the Study of "The Psychological Impact of School Experience"

Biber, Barbara. Formal and informal measures of thinking. In Gottsegen, G. and Gloria B. (Eds.), *Professional School Psychology*, Vol. 2, New York: Grune & Stratton, 1963.

Minuchin, Patricia, Shapiro, Edna, Dinnerstein, Dorothy and Biber Barbara. The psychological impact of school experience: methodological report of a study in progress, 1961 (mimeo).

Minuchin, Patricia. Self-differentiation in children of varying backgrounds. Paper presented at the American Orthopsychiatric Association, March, 1962 (mimeo).

Minuchin, Patricia. Emergent patterns of sex difference in a study of children. Paper presented at the New York State Psychological Association, May, 1963 (mimeo).

Minuchin, Patricia. Children's sex role concepts as a function of school and home environments. Paper presented at American Orthopsychiatric Association, Chicago, March, 1964 (mimeo).

Minuchin, Patricia. Solving problems cooperatively: a comparison of three classroom groups. *Childhood Education* (in press).

Shapiro, Edna. Study of children through observation of classroom behavior. In Bellack, A.A. (Ed.), *Theory and Research in Teaching*, New York: Bureau of Publications, Teachers College, Columbia University, 1963.

Shapiro, Edna. Some characteristics of children's imaginative fantasy. Paper presented at the New York State Psychological Association, May, 1963 (mimeo).

Zimiles, H. The psychological impact of differential school experience: the meaning and acceptance of childhood. Paper presented at the Society for Research in Child Development Meeting, University of California, Berkeley, April, 1963.

A study of the psychological impact of school experience: a series of papers on selected findings, Biber, Barbara, Zimiles, H., Minuchin, Patricia and Shapiro, Edna. Papers presented at the New England Psychological Association Meeting, 1962 and to Washington Associates of Bank Street College, 1962.

Appendix I

MODERN-TRADITIONAL IDEOLOGIES IN CHILD REARING

(The following is an attempt to specify aspects of parental ideology that distinguish between the Modern and Traditional points of view. Naturally, as with all typologies, the chracterization results in an ideal type, not to be found in reality. While it is obvious that ideology and personality are intimately related, the present formulation is based on the heuristic assumption that these ideologies may be mediated through a variety of personality structures.)

1. Investment of Authority

The modern parent views his authority as temporary, a role he will gradually cede as the child's maturity, intelligence and experience make it possible for him to assume responsibility for his own behavior, to become his own authority;	The traditional parent, viewing his authority as a quality inherent in the role and position of being a parent, does not set himself the goal of helping the child gradually assume authority for himself;
He may be benevolent in his exercise of authority, although he will often or occasionally consider it necessary to be firm or arbitrary; he holds it as a goal, however, to acquaint the child with the reasons behind his authoritative decisions, in order to encourage rational understanding of authority rather than unquestioning submission;	He may be benevolent in his exercise of authority but does not feel it necessary that his authoritative decisions appear reasonable in part or on occasion to the child; he is likely to be of the opinion that the child's inexperience makes this an inappropriate goal and that there is no implicit harm to the child in learning to accept authority without question;
The modern parent encourages the child in certain par relations with adults within the limits of the child's experience, without concern that this will interfere with his authoritative role.	The traditional parent sees certain clear-cut boundaries between child and adult roles and regards it as important that the child, being in the inferior position of having less knowledge and experience and of being physically and socially dependent, shall not be granted the privilege of crossing these boundaries on his own initiative lest, in so doing, he transgress on the orbit of parental authority.

2. Responsibility for Socialization

The modern parent is concerned with the conflict (repeated in different forms at various stages of development) between the requirements of socialization and the child's need to fulfill his impulses; accepting both, he attempts to work out a balance between them in accord with the child's gradually maturing capacities for inhibition, channeling and sublimation;	The traditional parent is predominantly oriented towards meeting the requirements of socialization; he is more concerned with the child's success in controlling unacceptable impulses (after early infancy) than in the possible cost of socialization pressures to the child's total personality.
Accordingly, he prefers modes of discipline and control that will be useful to the child's growing capacity to control himself even though they may not be immediately effective in changing his behavior.	He prefers forms of control that are efficient in altering the child's behavior toward increased socialization.

3. Meaning of Child Behavior

The modern parent tries to understand the meaning of the child's behavior by taking motivational and situational influences into consideration; he is more concerned with the determinants of the child's behavior than with the impact it makes on the environment;	The traditional parent is likely to take the child's behavior at face value; he is more concerned for the impact that it makes on the child's environment than in the sources from which it springs;
He is not likely to develop fixed criteria for evaluating child behavior since his judgments are dependent on seeing behavior in context for the individual child.	He judges the child's behavior by the extent to which it adheres to established criteria whose common denominator is the behavior itself not the determinants of the behavior.

4. Childhood as Preparation for Adulthood

The modern parent views childhood as continuous with and as a symbolic preparation for adulthood; he stresses the importance of satisfaction at every stage of development through experiences appropriate to the maturity level, viewing this process as fundamental to the eventual development of a stable, responsible adult.	The traditional parent views childhood as continuous with and as a literal preparation for adulthood; he therefore stresses direct and early training in those aspects of behavior considered essential to successful and proper functioning in adult life.

5. Standards of Achievement

The modern parent wants to foster the child's individual abilities and interests but he is also concerned that his performance be adequate by objective standards;	The traditional parent wants to foster the child's individual abilities but he is primarily concerned that his performance be adequate by objective standards;
He is concerned that the child feel adequate at whatever level his capacities permit him to function;	He may recognize and accept individual differences in performances but he regards these as different degrees of attainment of externally established standards;
He expects that a proper balance of self-realization and objectively-measured accomplishment will satisfy the child's need for satisfaction in achievement;	He measures achievement according to external objective standards and expects success by these standards to guarantee inner satisfaction;
He favors the kind of learning experience that gives priority to ability to think independently over the accumulation of knowledge as a measure of achievement.	He favors the kind of learning experience that regards mastery of subject matter as a primary measure of intellectual achievement.

6. Codes of Behavior

The modern parent may present his own code of behavior to the child with strong conviction, but he does not expect that this code will serve his child without modification as he grows into adulthood;	The traditional parent sees himself as the interpreter of society's demands to the child, and offers the child a code of behavior with which to meet these demands;
He expects, rather, that his child will integrate the parental code with the changing standards of his social and intellectual environment as the child sees and evaluates these;	He may be relatively patient and understanding in his way of inducting the child into this code but he expects the pattern to be accepted as presented;
He expects that, out of this independent maturing process, the child will eventually emerge with his own unique code for behavior, synthesizing the parental social-ethical orientation and the child's individual balancing of contemporary environmental forces;	Ultimately, he expects the child will emerge as an adult with a code very similar to his own and is likely to look upon changes as surprising, often undesirable deviations;
During childhood, a degree of experimentation with the presented code is expected.	During childhood, positive value and approval is placed upon willingness to conform to the code.

Appendix II

MOTHER-CHILD RELATIONSHIP DIMENSIONS: COMPONENT SCALES AND RATING PROCESS

A. Component Scales

Satisfaction with Child

Depth of satisfaction re characteristics positively valued by mother
Depth of dissatisfaction re characteristics negatively evaluated by mother
Amount of approval/disapproval of child expressed by mother
Inventory of aspects of child's personality, behavior, etc., liked and disliked by mother

Involvement in Child's Life

Curiosity, introspectiveness re child's psychology and/or own relation to child
Concern, worry, anxiety re characteristics negatively evaluated by mother
Interaction and rapport
Identification with child

Integration of Mother Role

Success in control
Confidence in self as mother
Enjoyment of mother role
Amount of home vs career conflict
Organization of mother's life-content and self-image around mother role

Consistency of Child Rearing

Consistency of control
Consistency of modern-traditional ideology
Consistency of modern-traditional ideology through time
Consistency of child rearing practices relevant to modern-traditional dimension
Consistency of modern-traditional ideology and relevant practices

Enactment of Authority Role

Punitiveness of control
Explanation of reasons for restrictions and demands
Quality of compliance expected
Encouragement of par relations with adults

Emphasis on Standards of Behavior and Achievement

Rigidity-flexibility of control
Amount of impulse fulfillment allowed
Emphasis on behavior standards
Emphasis on achievement

Encouragement of Individual Interests

Fostering of individual abilities and interests
Initiation of child's activities by child and/or mother

Ideology re Child Rearing and Education

(See Rating Process)

B. Rating Process

In general, both the major dimensions and their component subscales were rated along 9-point scales, though some had a tenth point for indicating "Laissez-faire" attitudes or behavior on the part of the mother.

Except for the rating of Ideology, which was done on a global basis, the ratings of the major dimensions were based on an evaluation of the ratings of contributing subscales. The ratings were done by two of the three interviewers.

The degree of inter-rater agreement tended to be relatively low (median r = .52). Many of the final ratings, therefore, particularly of problem cases, were arrived at by consensus, after both raters had made their independent judgments.

Appendix III

PROCEDURE FOR CLASSIFICATION OF MOTHERS ON MTO SCALE

The quantitative ratings on the five criterion variables were used to make the first and basic groupings of the mothers, as follows:

1) Scale points on the four interview dimensions were first assigned "modern" or "traditional" values, according to their meaning; thus, 1-4 as "traditional," 5 as "middle," 6-9 as "modern." ("Laissez-faire" scores were also noted, where they occurred) The range of questionnaire scores was divided approximately in thirds and also categorized as "traditional," "middle" and "modern."

2) The mothers were grouped into the following categories on the basis of the predominance of their modern or traditional scores on the five criterion variables as indicated:

Consistent Traditional:	5 traditional scores
Predominant Traditional:	minimum of 3 traditional scores; remaining scores, middle
Inconsistent Traditional:	minimum of 2 traditional scores; minimum of 1 "3***" score[1]
Middle:	minimum of 2 middle scores; remaining scores maintain balance between modern and traditional; no extreme scores

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[1] A rating of "3***" was given when there was evidence of great inconsistency with respect to a particular dimension.

Inconsistent:	striking inconsistency between scores and/or 1 or more "3***" scores
Inconsistent re Questionnaire/Interview:	striking inconsistency between the questionnaire score and the interview ratings
Laissez-Faire:	minimum of 1 laissez-faire score; remaining scores, middle and/or "3***"
Inconsistent Modern:	minimum of 2 modern scores; minimum of 1 "3***" score
Predominant Modern:	minimum of 3 modern scores; remaining scores, middle
Consistent Modern:	5 modern scores

The qualitative material was used essentially in a supplementary way, as follows:

3) One of the interviewer-raters reviewed rating annotations, written qualitative analyses of the mother-child relationship, where they existed, and, in a majority of cases, the verbatim transcript of the interviews. The purpose of this review was to take into account the predominant tone of the interview, any sharp differences in the ideology and practices of the father (and/or nurse, if there had been one), and marked differences between the mother's past and present attitudes and practices, as these factors might affect the categorization based on quantitative scores. On the basis of this review, shifts were made in 20 cases. No cases moved from modern to traditional categories or from traditional

to modern. Thirteen cases, however, were moved from one sub-group to an adjacent sub-group, and seven were shifted either from modern or traditional categories to the middle group or vice versa (usually from inconsistent traditional or modern to one of the middle inconsistent sub-groups, or vice versa).

4) The ten groups were reduced to seven by combining all the cases with no clear modern or traditional trend into one middle group, and by absorbing the small laissez-faire sub-group into the inconsistent modern group, whom they most closely resembled.

5) The final categories were assigned scale points as follows:

1 = Clear Traditional
2 = Predominant Traditional
3 = Inconsistent Traditional
4 = Middle: No Clear Trend
5 = Inconsistent Modern
6 = Predominant Modern
7 = Clear Modern

MODERN TRADITIONAL ORIENTATION RATINGS: DISTRIBUTION OF FAMILIES OF BOYS AND GIRLS IN THE FOUR SCHOOLS

	School	MODERN TRADITIONAL ORIENTATION SCALE									TOTAL
		Traditional				Middle	Modern				
		1	2	3	All Trad.	4	5	6	7	All Mod.	
TRADITIONAL SCHOOLS	**Browning**										
	Boys	1	3	2	6	3	1	0	0	1	10
	Girls	1	3	0	4	0	1	1	2	4	8
	Total	2	6	2	10	3	2	1	2	5	18
	Adams										
	Boys	1	7	4	12	5	0	1	0	1	18
	Girls	0	2	2	4	7	2	2	1	5	16
	Total	1	9	6	16	12	2	3	1	6	34
MODERN SCHOOLS	**Dickens**										
	Boys	0	4	1	5	3	1	2	0	3	11
	Girls	2	2	3	7	5	0	0	0	0	12
	Total	2	6	4	12	8	1	2	0	3	23
	Conrad										
	Boys	0	0	2	2	4	3^1	5	2	10	16
	Girls	0	1	0	1	3	4	2^1	2	8	12
	Total	0	1	2	3	7	7	7	4	18	28
	Total Boys	2	14	9	25	15	5	8	2	15	55
	Total Girls	3	8	5	16	15	7	5	5	17	48
	TOTAL	5	22	14	41	30	12	13	7	32	103^1

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1. The sample consists of 105 children, 57 boys and 48 girls, from 102 families; one mother is here entered in two categories since her modern traditional orientation was considered to be at different but adjacent scale points for her two children.

Appendix V

SOCIO-ECONOMIC-CULTURAL INDEX CATEGORIES: CRITERIA FOR HIGH, MEDIUM AND LOW CLASSIFICATIONS

	Family Income	Education of Parents (combined)	Social Status of Parent Occupations
High	Over $15,000	16 years beyond grammar school	Professional; Fine Arts; Applied & Commercial Arts; Senior Executive; Own large business
Medium	$10,000-15,000	8-15 years beyond grammar school	Semi-professional; Junior Executive; Own medium-sized business
Low	Less than $10,000	Less than 8 years beyond grammar school	White collar; Own small business

Appendix VI

CHILDREN'S DESCRIPTIONS OF A DESIRABLE TEACHER: VERBATIM ILLUSTRATIONS

"A nice teacher who taught you what you were supposed to learn...and who could bring out talent...and taught you more than you were supposed to learn if you had learned everything that was in the book...and...who was very nice and gives you...well a bit of extra gym maybe once in a while. That's what I would like to have in a teacher...not one of these who yells every time, watches with eagle eyes, and she stares at you and then she lets you have it..." (High Achieving Boy)

"A good teacher and a teacher that's not too strict and she doesn't yell a lot, and she doesn't make you stay in out of the yard, and, uh, she knows how to punish you. She doesn't make you stay out of games and, uh, she lets you play all the time. Well, when...you're allowed to play. And a teacher that doesn't... well sometimes she holds you around and she ...pushes you." (High Achieving Boy)

"Doesn't get too mad. Doesn't give us too much homework... and ...a teacher who understands, teaches, you know, understands her subject. And also I'd like a teacher who teaches you a lot of fractions, because, you see, I'm ahead of my class in fractions... (High Achieving Girl)

"Well, a teacher that can crack jokes...but when he's strict, he's strict and he doesn't have teacher's pets. (High Achieving Girl)

"I don't know, I can't tell, I can't describe it...no work. She doesn't blow her top every minute...and uh...nice. Lets you have whispering periods at times...not all the time, but normal times..." (Low Achieving Boy)

"She (current teacher) is one of the most goodest teachers I ever had. Really. Because...my mommy and my father...uh... every teacher so far, somebody in my family disapproves, but we all approve of her. She's a very good teacher. She never yells and she always - when she's mad she never yells. She just holds it in. Because you can see. And when she sees somebody talking when she's talking, she just looks at them and makes them look foolish, you know, she just looks at them and everybody looks at them too. (laughs) And so they stop a few minutes later and... everybody's looking at them." (Low Achieving Boy)

"Well, I'd like her to give us work ...you know...and I would ...um...like for her not to yell all the time ...and for her to take us out everytime we have play period...and not yell ...and be nice to us..." (Low Achieving Girl)

"Well, I hope I get a good teacher...Well I don't think she should yell too much. ... breaks your eardrums. And, uh, I think she should give us no tests. Well I think she's (current teacher) pretty nice cause she sometines tells jokes and everything. Should have good students...If you have good students, there's not too much yelling." (Low Achieving Girl)

"ACHIEVEMENT" ITEMS ON PARENT QUESTIONNAIRE

(The following are Agree-Disagree Items)

1.. Whatever one may think about the importance of enjoyable school subjects like art, music, and dramatics, they should be the first to be cut down in the day's schedule if the children's serious academic work is falling below par.

2. The purpose of a report card is to let parents know how their child is doing in relation to the other children in his class.

3. School should store away in a child's mind as much as possible of the subject-matter which every well-educated person must know. No harm is done if much of what the child learns is not fully understandable to him now. In later years, he will appreciate knowing it.

4. Above everything else, a child goes to school to learn a basic body of facts.

(The following are Multiple Choice Items)

5. Everyone agrees that adults should be well-informed and able to think for themselves. To achieve this end, which is more important for school to emphasize? (check one)

    a. Making sure that children learn basic subject-matter; only then will they be qualified to think for themselves as adults.

    b. Making sure that children learn to think for themselves now; this is the best guarantee that they will finally acquire the facts they need to know.

6. Which of the following reports about a child's school work would you rather receive? (check one)

    a. Your child does well in original research, and in areas which require independent thinking. But he seems unwilling to apply himself to mastering those subjects -- for instance, spelling -- in which he is weak. His over-all performance is therefore considerably below the top of his class.

b. Your child's over-all performance in his regular school subjects is near the top of the class. But he seems uncomfortable when faced with unfamiliar tasks or problems.

7. The teacher was explaining her program and goals to the parents of her 4th grade children. Each parent listened attentively, thinking of his own child and hoping that what she said would answer the important question on his mind. Which question would be closest to yours?

a. Mr. A. wondered why his boy, David, with his unusual musical gifts, should be expected to keep up with the class in arithmetic.

b. Mr. B. was glad to hear the teacher's explanation of how she had improved the children's spelling but he wondered whether Alice, who needed to improve in spelling, ever had the chance to "tell poems" in school as she did so delightfully at home.

c. Mr. C. thought the program sounded pretty good, on the whole, but wondered if the teacher realized that most children of this age need a great deal of attention to the basic skills and to developing better work habits.